An Address

ON

THE ETHICS OF INSANITY.

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Perhaps there is no subject in the whole range of medicine of more interest, and, to the general practitioner, of greater difficulty, than insanity. The very nature of its symptoms and the difficulties experienced in their management renders a case of mental disease, as occurring in our general practice, one of great worry and anxiety. Such cases are outside, as it were, the general practitioner's sphere; and, accordingly, they are usually relegated to a separate department of medical science, and this was done long before specialism in medicine became so fashionable as it is in these days. Cases of mental disease are gratefully left by the general practitioner to men who, from their special training, are supposed to be more able to cope with the symptoms. As the education of the medical man advances the gap between the alienist and the general practitioner is steadily diminishing.

If there can be advanced one argument in favour of specialism in medicine surely the care and treatment of mental diseases is that argument, for they demand special education and training, such as can only be obtained by a long residence in institutions where the insane, on account of their symptoms, are congregated.

It is not to be expected that the general practitioner can even pretend to more than a rudimentary knowledge of psychological medicine, or the modern methods of the treatment of insanity. On the other hand, no one would credit the alienist with an intimate knowledge of the routine work of general practice, or with the various methods adopted to humour the sane sick, so necessary to the success of the general practitioner.

I purpose in this address to deal with several matters concerning insanity, regarding which the general practitioner, especially if he is of the "family physician" type, may be called upon to express an opinion, or even act promptly, for often so much depends upon his decision. For example, promptness of action is imperative in dealing with a case of acute insanity in a private house. The doctor has to decide, and this regardless of possible legal contingencies, whether his patient should be "certified" and removed to a public institution. Again, he may be asked to give an opinion on the delicate question of marriage between persons of insane or neurotic diathesis; the care and education of children of such unions; the testamentary capacity of persons of idiosyncrasic tendencies, or suffering from gross nerve lesions, or even some of the vague symptoms suggestive of the borderland of insanity; and finally, there are many legal questions which may have to be answered by the family physician, with results entailing, perhaps, the gravest consequences to the persons concerned.

It is admittedly rare that a case of acute insanity can be successfully treated in a private house, and the first difficulty that faces the family medical adviser is the determined objections of many persons to the removal of the patient to a public institution if this should entail "certification." Twenty years ago, and more, the public were intensely prejudiced against "certification," "lunatics," and "asylums," and this prejudice is as keen to-day as it ever was. Only the other day I had the greatest difficulty in convincing a lady, whose husband I had advised removal to an asylum, that the attendants neither beat nor starved the patients. It is one of the saddest blots on our so-called civilization that these terms "certification," "lunatic," and "asylums" should still spell *opprobrium* to the general public, even although they are better educated, and our asylums are, if possible, better administered, than they were twenty years ago. As medical men, and in the best interests of patients suffering from this sad disease, I consider it is our bounden duty to inquire into this prejudice, and, having found the cause, to suggest a remedy.

It has always seemed to me that the general practitioner himself is not altogether irresponsible for the dread the public have of the only rational treatment for their insane relatives; perhaps this is a sin more of omission than commission, but, nevertheless, they do not make themselves conversant with the working of our public asylums, and are, accordingly, not in a position to combat the absurd arguments of their patient's friends, whose sole source of information may possibly be the usual halfpenny daily paper, whose circulation depends upon well-worked-up scandals referring to our public and philanthropic institutions. If the doctor successfully combated these unreasonable prejudices, I am sure we should hear less of them, and possibly many mental lives, which are now lost, would be saved.

But there is another reason for the prejudice the public have against "certification" and "asylums," and this is the existence of a law called "the Lunacy Act," for no one can be treated in an asylum without coming under its ban, and the curse of the law is "certification"—that is, the person is duly pronounced a "certified lunatic." To the educated this is merely a play of words, but to the ignorant or prejudiced it spells disgrace; it means loss of social and domestic rights, deprivation of all civil rights, separation from wife, family, and home, and, if—I had almost said unfortunately—the patient does recover, he is for ever afterwards branded, "He was once a lunatic"; he is shunned, and perhaps feared, by his friends, and possibly never again attains the social position he lost when he was "certified."

It is true there is a little clause in the Lunacy Act, which comprises only 342 sections and 146 rules and regulations, which provides for the "voluntary" treatment of mental diseases, but this section only applies to persons who know what they are doing; but what about the poor patient who, from the duress of his affliction, does not know what he is doing? It is the sick who have need of a physician; they who are well need no physician; these latter have to wait until they are so ill that the doctor "certifies" them, and they are then "lunatics."

After-care associations are needed for the poor mortals who are liberated from these asylums; they want a protecting hand to guide them until they are fit to guide themselves; does it not seem strange that we hear of no "after-care associations" in connexion with our hospitals? And this is what we call the twentieth century treatment of the saddest disease that can befall our race! The treatment may be, and is, all right, but it is the means to obtain this treatment I object to. If we are to progress, if we are to be of any real use to suffering humanity, then our business should be to place our patients under treatment with as few obstacles as are met with when we send a patient with a broken leg to the hospital. In fact, our asylums should be hospitals, not in name alone, but in very deed, and there is no more logical reason for the law to step in and offer definitions of insanity, and interfere with its prompt treatment, than that it should regulate the terms upon which a case of pneumonia shall be admitted to the hospital.

Possibly the reason why the law regulates the treatment of the insane is the fact that they are deprived of their liberty, but surely, if the deprivation of liberty is essential for the treatment of this disease, some other method could easily be found without the necessity of branding the patient a "lunatic." If it is found impracticable deleting the present antiquated and cumbrous Lunacy Act from the Statute Book—and no doubt many objections to this would be advanced by interested parties—then it should be replaced by another Act, with another name, and treating of the insane more like sick persons than "lunatics," and our asylums more like hospitals than "places of detention."

In view of these facts it is reasonable your patient's friends should prefer to have him treated at home; your arguments, which perhaps you only half believe yourself, failing to overcome his prejudices, you submit; but, after months of nursing, you are forced to either give the ultimatum—removal to an asylum, or else you threaten to give up the case altogether. Meantime the delay has not benefited your patient; it is likely he has now lost his best chances of recovery, for it is a well known fact

that early treatment in most cases of acute insanity gives the best prospects of recovery.

Apart from this possible delay, the question arises, "At what stage of the disease are you justified in certifying a case?" The "powers that be" are generally anxious to make the existence of a delusion the main factor in your certificate. But a person with delusions is not necessarily "certifiably" insane; it is only when some practical manifestation of the delusion occurs that you are justified in granting a certificate. For example, a patient may tell you his soul is lost, and he must die; the natural outcome of such delusions is self-destruction, or an attempt at such. Then "certification" comes too late in the majority of cases; it would almost seem as if certification were resorted to not so much for the purpose of obtaining treatment for the delusion as to prevent possible self-destruction, and this is contrary to the primary tenets of rational medicine, for, in our treatment of disease, we deal with the cause, not the consequent or symptom.

The next question that arises is, "When should a patient be sent to an asylum?" If the case is likely to be one of long duration—say any time over a month—then the sooner he is sent the better for him. It is a great mistake, but one often made by doctors, to keep their patients at home until some serious symptom arises—until, in fact, the patient becomes "dangerous to himself or others"; they seem to forget that an asylum is not only a place for care but also a place for treatment, and many cases in our asylums now could have been cured had they been taken in time and the proper treatment applied.

Finally, in this matter, if the law has to be complied with, it is better that medical men should study a little more closely the certificates they sign when consigning a patient to that unfortunate class, "certified lunatics." We are constantly finding mistakes in the medical certificates; these are more frequently mistakes of omission rather than commission, but it should not be forgotten that they are legal documents of very great importance, and it is not creditable to an educated profession to find careless composition, misspelt words, or necessary clauses left out altogether. Such carelessness is not characteristic of the average doctor's other dealings with his patients.

The doctor, especially if he is at the same time family physician and confidential adviser to his patients, is sometimes consulted in matters pertaining to the marriage of individuals where a tendency exists to mental or nervous disease, either in the ancestry or in the individuals themselves, and this is perhaps one of the most delicate questions which it is our duty to deal with.

Persons often get married without any sense of responsibility for the miseries they entail upon those who will be heirs of their imprudence—indeed without regard to anything but their own personal gratification. Many a man suffering from a hereditary disease for which he certainly is not to blame has cursed the day his parents married. As Maudsley says, one is driven to think that man is not the pre-eminently reasoning and moral animal which he claims to be, or else there is in him an instinct which is deeper than knowledge. He has persuaded himself, rightly or wrongly, that in his case there is in the feeling of love between the sexes something so sacred and mysterious as to justify disregard to the consequences in marriage.

Whether the marriage of cousins results in a degenerate stock is even yet a moot question. Maudsley is of opinion that unless a fault exists in the nervous structure on both sides no harm is likely to accrue. Rather, such unions often produce geniuses, who, after all, may be considered as degenerates, and within the borderland of insanity itself; should there be a fault on either side, then this fault is liable to be intensified in the progeny.

Clouston does not advise the marriage of persons with a neurotic taint, and considers the occasional birth of a genius does not justify the risks of generating a stock of idiots and imbeciles as well. He advises a man with a neurotic strain, if he *will* marry, to marry a woman fat and lethargic. He says "there seems to be a special tendency for members of neurotic families to intermarry, and an affective affinity amongst such that tends towards love and marriage."

While it would be wrong to advise marriage in cases where a hereditary taint existed, at least until the person was well advanced in years, and had kept free from mental or nervous symptoms, it would be just as wrong to oppose marriage to a person who had once been insane, but whose insanity was due to some preventable cause not likely to occur again, such as post-febrile or traumatic insanity.

It is interesting to note that, with the advance of education and civilization, this question of marriage is receiving more and more attention. It is utterly absurd that we should devote more attention to the mating of our horses and pigs than we do to that of our sons and daughters. We are certainly all agreed that "Love is blind"; only it is sad to think how much suffering might be avoided if the bandages were occasionally removed from Cupid's eyes, and men were allowed to exercise the same care in the selection of their mates as they do when breeding their cattle. If such a plan were adopted, although there might be fewer geniuses and idiots, there would at least be a healthier and happier race.

If love is closely allied to insanity, as some aver, then it may be due to some bacillus, and it is possible an antidote may yet be discovered which in the hands of the family physician will effectually prevent the awful calamities that are likely to befall some unions.

In such a delicate matter as this no medical man is doing his duty, either to his own conscience or to the best interests of his clients, if he refrains from warning them of the grave risks they run in being "unequally yoked"—these risks are not necessarily to the persons themselves, but to their yet unborn progeny. How much untold suffering would be avoided if the "natural law of selection," as found in the lower animals, and even plants, were universally followed. We trust the time is not far distant when no marriage will be considered lawful without a clean bill of health on both sides, and the minister or magistrate who marries "uncertified" couples dealt with as a criminal.

Of the various diseases which are considered as typically hereditary, insanity stands out pre-eminently—upwards of one-third of all our admissions to asylums exhibiting an admitted hereditary taint. Under the law of heredity, it does not necessarily follow that insanity must beget insanity; rather the types of disease, known as the neuroses, and of which insanity is only an example, may produce any of the other types in the offspring. For example, the drunken father may beget the idiot, or the epileptic mother a drunken son.

By careful "selection" it might be possible to ultimately and entirely eliminate the neurotic diathesis, but this fact does not yet trouble the ardent wooer of Cupid's favours, who, regardless of consequences, persists in satisfying his animal passions, which perhaps he considers too holy a flame to have cold water thrown upon it in this way!

Should it happen that, in spite of our advice, our patients insist upon getting married, our next care will be their children; and here we generally find the parents more amenable to reason—the ardour of love having by this time partly died out, and been replaced by common sense. When it is represented to them that health, and perhaps life itself, depends on the way in which the children are brought up and educated, it is rare indeed the parent will turn a deaf ear to the advice of the doctor.

In considering this subject we should recollect one of the great laws of heredity—namely, that it is not the disease itself which descends to the child, but merely a predisposition or tendency to it. Savage defines a "neurotic" as a person possessing a nervous system too delicate for his surroundings, and liable to be upset in various ways; the development of the "neurotic" is the natural outcome of highly specialized modes of living, and the condition, according to him, embraces two groups—(1) those who react very rapidly and delicately to their surroundings, among whom we find geniuses, and (2) those who are unstable without being brilliant—reacting destructively to their surroundings. Certain additional influences, acting upon the neurotic temperament, may produce insanity in one or other of its various forms; for example, the undeveloped brain, associated with the neurotic tendency, may result in idiocy; and the critical periods of life—puberty, the puerperium, and the climacteric period—may, in cases where the neurotic predisposition exists, produce the forms of insanity characteristic of these crises.

In the children of neurotic parents to produce the same condition we require similar, if perhaps not quite so severe, influences as those which originally induced the disease in the parents. It is not the disease, but a predisposition to it, that is hereditary; so it is with the neuroses, but in this case the predisposition is much more intense than in the case of many other diseases possessing a hereditary predisposition, for we are here dealing with a much more delicate and unstable organ—the brain.

Such considerations as these should guide us in advising our neurotic patients as regards the schooling, dieting, climatic and social surroundings of their children. Our advice should have as its main object the reducing to a minimum risks of exposure to such influences as we know are likely to unbalance a mind already unstable from hereditary taint. As regards education, it is obviously a mistake to cram a neurotic child's brain either too early or too much. The simplest schooling possible, and this without competitive tests, is all that should be permitted. His food should be of the plainest, and all the luxuries of the table strictly denied him. His life should be, so far as is practicable, an open air one; Clouston advises that such cases should lead the "natural life"; that is, they should throw off all the trammels of civilization and live healthy lives in the open. Such treatment is more effective in developing and strengthening the mental and physical systems than the administration of physic with close confinement, whether it be in the school or in the office.

The last subject to which I shall refer on this occasion is that of the testamentary capacity of cases of mental disease, and of persons suffering from somatic conditions affecting their mental powers. These are subjects usually decided in courts of law, and medical evidence is generally adduced on both sides; it would be a good plan if in these cases the medical witnesses on both sides should have the opportunity offered them to consult together, as was discussed at one of our meetings a few years ago. If this were more frequently done there would be less often seen that humiliating exhibition of medical men swearing differently on the same subject—a laughing-stock of both judges and barristers. Not only may insanity raise doubts as to the validity of a will, but also many nerve diseases, such as lesions of the speech centre. And yet a man may be insane and, at the time he makes his will, know perfectly well what he is doing. In such a case if the court is satisfied the testator knew the value of his property and how he was disposing it, no matter how eccentric he may have been, or how deluded he may be, the will will be declared valid.

Bodily disease, or brain disease, such as paralysis, may so affect the mind as to render the subject incapable of making a will, but in these cases it is for the objectors to prove incapacity before a court of law will upset the wishes of the testator, and therefore much will depend upon the medical evidence one way or another.

In the remissions of mental disease, whether these be of long duration or only ephemeral, a will may be drawn up by a patient which will be upheld by the court; and even in cases of insanity, should the tenor of the will show no indications of the disease from which the testator suffered, it will be declared valid.

The question may arise whether mere eccentricity would affect the validity of a will; legal authorities say that if only eccentricity can be proved, the courts will not interfere; but, then, who is able to decide where eccentricity ends and insanity begins? There is no sharp line of demarcation separating sanity from insanity; we are here on the threshold of mental disease, and in any such case the courts are likely to obtain very little assistance from the medical evidence, for each medical witness is liable to be biassed according to the side upon which he is retained; and perhaps his opinions are influenced, unconsciously it may be, by the spirit of contradiction inherent in us all.

In conclusion, these are only a few of the many questions that are liable to arise in the general practitioner's experience, but they prove the close union there is between general practice and the work of the alienist; they prove, likewise, that, however we may specialize in our separate spheres of work, we still belong to that great profession of medicine whose sole aim is to educate the people, relieve suffering, and to prevent disease.

A Clinical Lecture
ON
RHEUMATOID ARTHRITIS.

BY

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NEXT to cancer one of the most distressing diseases which we have to deal with, especially in institutions devoted to the treatment of patients suffering from so-called "incurable maladies," is the one which for purposes of general description might be styled "arthritis deformans." This term, however, must be clearly understood to denote not a disease but a series of conditions which have the common characteristic that they are associated with changes in the joints and other parts which lead to deformity and crippling. To attempt to deal exhaustively with this subject in the limits of a short address would be an impossible task, and I must content myself by directing attention to the fact that, like the so-called rheumatic diseases, this disorder is becoming more and more capable of differentiation, and its future classification will, if I mistake not, depend less upon clinical features than upon etiological factors.

All of the cases, to whatsoever category they belong, probably result from toxins or infections of one kind or another, sometimes being due in all probability to actual organisms in the blood—such as, for instance, the pneumococcus, which has undoubtedly proved the starting point of the disease in some cases—but more often depending upon the introduction of toxins into the blood from local seats of infection, as I pointed out about nine years ago in a paper published in the Royal Southern Hospital Clinical and Pathological Reports.

In addition to these factors, one has to remember the cases which may be regarded as secondary to such diseases as true rheumatism and gout.

There are two great classes into which cases of arthritis deformans may be primarily placed, depending upon the facts that in one of them the synovial structures and the periarticular tissues are mainly affected, the cartilaginous and bony parts being only secondarily involved, if involved at all; whereas in the second class we have to place quite a distinct series of cases, characterized by an initial disease of the articular cartilages and of the bony structures, the change which takes place being firstly hypertrophic in character but subsequently leading to atrophy and destruction.

The cases which I am going to refer to on this occasion belong mainly to the first class, and they constitute the condition which we know as rheumatoid arthritis, so called because of its resemblance to rheumatism—in fact, in its acute variety it is so often mistaken for acute rheumatism that patients are generally sent into our hospitals as suffering from that disease.

I shall not at once speak about this acute variety, because I wish to direct attention to the chronic variety of the disease which we so commonly come across, and which causes such a lot of trouble among comparatively young people.

The incidence of the disease, it is needless to say, is greatest among females. Out of a series of 150 cases of both sexes recorded by Llewellyn Jones, 24 occurred between 15 and 20 years of age, 37 between 20 and 30, and 24 between 30 and 40 years of age. The cases among males of the same ages being only 1, 6, and 11 respectively.

Although the joint symptoms are the ones which undoubtedly arrest the attention of the patient in the first instance on account of the pain and crippling which they occasion, there is no doubt that the toxin responsible for this disease produces premonitory symptoms which sometimes exist for a long time before the joints are definitely attacked.

These prodromata mainly affect the vasomotor portions of the nervous system, and, as I pointed out in a paper which I read in 1902 at the Liverpool Medical Institution,

the symptoms often exist for a long time before the joints become affected. They consist of certain Raynaud-like phenomena which I then described, and which were at about the same time independently described by my friend, Dr. Llewellyn Jones, of Bath, and are manifested chiefly by the dead, grey-blue looking fingers and numbness of the extremities, which lead up to the periarticular swellings which herald the classic symptoms of the disease. Tinglings and numbness are very common, and shooting pains along the lines of the nerves, and if the case can only be got hold of in this stage I feel convinced that an enormous amount might be done to stay its course, and to prevent the terrible crippling which it brings in its train at a later period. It has to be remembered that these conditions are not *only* connected with rheumatoid arthritis, and it is interesting to note that this disease and gastric ulcer, which are both so common in young women, have each this type of premonitory trouble; in fact, my belief is that gastric ulcer depends upon a Raynaud-like vascular spasm in the vessels of the gastric mucosa and wall, and I have no doubt that it is also due to the absorption of toxins so far similar in their effects to those which give rise to rheumatoid diseases. Another interesting set of symptoms which we must bear in mind are those which were long ago pointed out by Trousseau, namely, muscular spasms which give rise to cramp-like contractions in the hands and feet, and which sometimes show themselves before the joints become much affected, and indeed they continue all through the course of the articular affections and long after they have ceased to be the seat of pain. Like the vasomotor spasms to which I have referred, these cramps tend to be symmetrical; they flex the fingers and toes painfully, and occasionally the calf muscles or even those of the thighs and abdomen. They are evidently very painful, for one has heard patients cry out in agony when they occur. In one case that I remember, the act of micturition started this cramp in the abdominal muscles, and caused severe pain.

Another evidence of the early influence of the poisons of this disease upon the nervous system is to be found in the muscular weakness which so often precedes the joint affection. It need not be constant—indeed, as Spender pointed out, it is often quite transient in its duration, giving rise to the slipping of articles from the fingers, and leading the patients to complain that they have lost the power of performing fine muscular actions with their hands, and that they get very easily tired when they write letters or play the piano. In young girls this latter indication, associated with the others that I have named, is one never to be lost sight of. Only a few weeks ago I came across a case where the child, who had been a brilliant little pianist, lost the power in her wrists in this way, and shortly afterwards began to suffer from rheumatic pains in her hands and feet, symptoms which could not be disregarded in view of what I have told you. These feelings of weakness are sometimes associated with distinct muscular weakness, and some authors have described fibrillary twitchings of the muscles suggestive of the onset of some of the organic diseases associated with atrophic myopathy. In many cases of the disease the joints become affected, so to speak, paroxysmally—that is, a given joint does not become affected and then progress steadily from bad to worse, but it becomes the subject of a series of attacks of inflammation with periarticular swellings, and at last becomes the subject of chronic change. In some cases, however, after an insidious onset, the disease gradually (though not invariably) progresses in a centripetal way, spreading from the smallest joints of the hands to the wrists, elbows, and shoulders, and similarly from the feet upwards, and it is characteristic that the temporo-maxillary articulations and those of the cervical spine are rarely spared.

You are familiar with the spindled-looking swellings of the fingers found in this disease, and how the skin over them looks grey-blue. The joint fluctuates or feels boggy, and in all the joints, both great and small, it depends upon thickening of the synovial membrane *plus* a certain amount of fluid in the joint, but largely also is this due to villous overgrowths in the synovial fringes which are almost universally present, and it is to the presence of these that the creaking sounds so characteristic of the disease are mainly due. Occasionally they become very large and, getting between the articular surfaces, cause sudden intense pain, with limitation of movement in the knee-joints, followed by an acute attack of synovitis.

I want, while I remember it, to direct your attention to the fact that the early deformity in many cases of rheumatoid arthritis is less due to the arthritic condition than to the extreme muscular irritability which is present. The cramps (as well as the vasomotor phenomena, including sweating of the soles and palms) continue, and if you press back the flexed hands and fingers you will find that they manifest clonic contractions, indicative of the irritable state of the neuro-muscular system. The ulnar flexion is in part due to the same thing, always remembering the stronger pull of the interossei towards the ulnar side.

I need hardly refer to the other phenomena belonging to this disease beyond mentioning that the occasional attacks of pyrexia, accompanied by fresh joint infections, the tachycardia, the more than occasional involvement of the thyroid gland, the mottling of the skin and its pigmentation, and the changes in the teeth and nails, all denote that a general poison is at work, and that we call the trouble by the name we do only because the joint symptoms are the ones which seem predominant, and by their painfulness resemble rheumatism, and lead the patient to think that she has a rheumatic disease.

All of these conditions belong to the disease in its active stage, which may last for years, and after the poison is got rid of the unfortunate patient is left crippled with flexed wrists, all her joints flexed, being no longer swollen but atrophied and even dislocated, and, as I have pointed out elsewhere, the fingers hanging like tassels, but painless and remarkably useful. The skin of the hands is now dry and thin and atrophied, and if evidence of the loss of nervous tone is required we find it in the tendency which now exists to the formation of patches of tissue necrosis, sometimes over seats of pressure, sometimes not, but which, if they once occur, almost invariably lead to death from septic infection.

The ultimate purpose which I have in my mind in this lecture is to speak about some clinical facts which I have unearthed during recent years, and which I venture to think have altered considerably the prognosis in quite a number of cases of rheumatoid arthritis, and there are one or two points in treatment also which may prove interesting. Before proceeding to illustrate these points to you, however, I must shortly say something of the pathological changes which are found in the joints of a well established case, say one which has caused the patient to be bedridden, with flexed and painful joints, and with evidence that the trouble is still progressing. It is not often that we have the opportunity of examining such a joint, because in the vast majority of cases the patients outlive the disease and reach the period of atrophy and deformity to which I have alluded. I have made three or four *post-mortem* examinations of the joints, but mostly at a late stage of the disease, when secondary changes have occurred—such as degeneration of the cartilages with rarefaction of the subjacent bones—but it seems evident that when actively causing crippling it is the synovial membranes and periarticular structures which are mainly thickened and inflamed, the cartilages remaining for the most part intact, and the adhesions which take place have much to do with the fixation and ankylosis of the parts, which is so common a feature of the disease.

I do not, in the present stage of my knowledge of rheumatoid disease, think that there is any one organism associated with it; but I have no reason for altering my conviction, long ago expressed, that the seat of infection is commonly one or another of the mucous surfaces, and we cannot get away from the impression that, being so common in the female and so comparatively rare in the male, attention must be directed to those mucous tracts which are associated with the former sex. We know how occasionally the colon bacillus finds its way into the female bladder and gives rise to very serious symptoms, probably by infecting the urine, and giving rise to a cystitis which is associated with constitutional symptoms. No doubt the infection takes place through the urethra. In cases of rheumatoid disease for some considerable period I have had vaginal swabs taken, not because any symptoms or signs have particularly

directed attention to these parts, because, as in the case of nasal infections provocative of the disease, it is not necessary to have them. A chronic rhinitis with pocketing of the secretions in which the toxins become generated is not necessarily so troublesome as to make the patient think much about it, and so, even with no symptomatic indications, organisms may and do produce toxins in the utero-vaginal passages which are certainly related to the disease. Through the kindness of Dr. Moore Alexander, a considerable number of swabs have now been examined in rheumatoid cases, and the *B. coli* has been found, and the examination of a large number of controls has proved that it is not present normally. In one or two instances staphylococci have been found (a recent case presented a large number of these organisms), but this organism is associated with osteo-arthritis rather than the rheumatoid form.

Now in treating these cases it is obvious that several distinct lines have to be followed. In the first place, the local condition must be attended to by systematic douching and cleansing. Secondly, steps must be taken to favour the elimination of poisons already in the blood; and, thirdly, the local joint trouble must be treated.

In connexion with the second of these essentials one must again refer to an observation which I made a good many years ago, and which is now becoming recognized pretty generally concerning the perverted thyroid secretion which is so often present. Quite a number of the patients get enlarged thyroids, and it is noteworthy that the glands sometimes diminish in size when thyroid substance is given moderately, and that the general symptoms of the disease improve under this remedy. I take it that the enlargement of the gland in these cases is a result of its endeavour, by drawing more blood through itself, so to speak, to supply the tissues with the normal secretion which it fails to produce, and that the giving of thyroid reduces the necessity for its attempts in this direction. There is no doubt that in many cases thyroid extract is of great value, especially in those cases where the patients tend to put on flesh and have no tachycardia. It must be borne in mind that Raynaud-like symptoms and cramps in the extremities are themselves symptoms of athyroidea. Regarding other drugs, I have found most benefit from quinine salicylate with salol. Where the colon bacillus infection is derived from a chronic colitis, in a way presently to be described, one of the most effective remedies is ox gall, given in 10 to 15 grain doses (in cachet) several times daily.

But now about the joints. I have explained how they become fixed by fibrous adhesions and by fibroid thickenings of the synovial and periarticular tissues, and I have not the slightest doubt that fibrolysin is a most valuable remedy which helps to release them and render them flexible, and another most useful application is the oleate of mercury (10 per cent. in oleic acid), having hydrochloride of morphine mixed into it in the proportion of ½ grain to the drachm. I have had a number of cases of rheumatoid diseases in girls and children who have been treated on the lines which I have indicated—cases which have been crippled and bedridden for years, but which have become quite well, and able to take their places as workers and as useful members of society.

There is just one other class of cases to refer to here, namely, those in which a chronic colitis is the local seat of absorption. Recently I had under my care a very intractable case in a girl who had been bedridden for years. Her joints were flexed and fixed, and were progressively getting worse. She had no pathogenic organisms in her genito-urinary mucous tract, but she had a troublesome colitis. After getting her considerably improved in the hospital I sent her to the Mineral Water Hospital in Bath, where Dr. Preston King kindly carried out the Plombières line of treatment (which consists in irrigation of the colon), with the result that she came back able to use her arms and hands freely and to walk fairly well, although unfortunately her feet and ankles have remained rather stiff and painful. I believe that Still's disease in children, which is a rheumatoid disease associated with large spleen and lymphatic glands, is only another variety of the toxic class, and that, sooner or later, the source of infection will be discovered and become capable of being treated. It is possible that it follows upon one of the mysterious colon bacillus infections which we meet with from time to time in young children, the origin of which is not yet fully understood. Chronic rheumatoid arthritis, as I have said, often follows upon an acute attack, for a description of which I must refer you to my paper in the Royal Southern Hospital Reports for 1902, and to a post-graduate lecture published in the *Lancet* of 1904. It is nearly always regarded as having been a prolonged case of rheumatic fever, and this has given rise to the impression that the disease under consideration is a rheumatic one. It is best to call the antecedent acute disease rheumatoid fever, and its later stage rheumatoid arthritis.

One word about osteo-arthritis, and I have finished. I merely name it in order to differentiate it from the diseases of which we have been speaking. This is the disease in which the cartilage undergoes hyperplasia, then disappears, leaving the eburnated bony surfaces in contact, and in which overgrowth takes place in the bones, giving rise to outgrowths. With rare exception, this disease begins during or after middle life, and a variety of it constitutes the arthritis of advanced age. It certainly occurs in young people, but much more rarely than the rheumatoid arthritis, and I have seen three cases in children, one of them quite recently. An *x*-ray plate of his hands demonstrated that cartilaginous destruction has taken place. The deformities are more marked in this disease than in the other, owing to the bony outgrowths, and it is in this disease alone that surgical interference is warranted.

CATS AS PLAGUE PREVENTERS.

BY

LIEUTENANT-COLONEL ANDREW BUCHANAN, I.M.S., M.A., M.D.

It is now about three years and a half since I first endeavoured to show that the best way to prevent plague in India is by keeping cats, and although considerable progress has been made, and many people have now come to realize the advantage of keeping cats, there are still some who hesitate to give the keeping of cats first place in the list of preventive measures. I should like now to reply to some of the objections that have been made regarding the cat; secondly, to consider some of the circumstances which have tended to retard the proper appreciation of the cat; and thirdly, to give some additional evidence in favour of the cat, and particularly to draw attention to the very valuable evidence from Professor Koch, who for some years, quite independently, advocated the employment of cats for preventing plague, and also to the evidence which Dr. Gimlette has supplied from Malay.

Objections to the Cat.

It has been stated that the Indian cat is not a sufficiently good rat killer to justify the expectation that cats will prevent plague, and here I must admit that there are many ways in which the activities of the cat can be defeated. For example, a lady informed me that although there were two or three cats in her compound (the enclosure in which the bungalow and outhouses stand) still there were several rats. It was found that about fifty old packing cases were stored in one outhouse, and as most of these packing cases contained old books, papers, straw, or rubbish, the rats had made holes in many of them, and so were able to escape from the cats. When these boxes were cleared out and the rubbish was burned we heard no more about rats in that place. Occasionally we found that a person who had a cat in his own house would complain that rats were frequently coming in, but on making inquiries it would be found that there were many servants' houses in which rats were abundant because there were no cats in them. It is particularly desirable that the servants should be made to keep cats. Early last year I made the following experiment: Eight cats and seventeen rats were let loose in a room with glass doors, so that we were able to watch the result. In a few minutes all the rats were killed; one small cat ended up with four dead rats in its mouth, another had three, and another had two. The cats were ordinary

village cats, and had not been specially selected. The editor of the *Indian Medical Gazette* was among those who at first doubted whether plague could be prevented by cats, but after hearing the subject fully discussed at the Bombay Medical Congress he wrote as follows:

"Conversation with many men after the meeting convinced us that very many were coming round to Colonel A. Buchanan's views that the cat is the natural enemy of the plague rat, and that it is one of the measures of plague prevention dictated by their Scriptures to Mohammedans and Hindus alike, and which will therefore be acceptable to all. We certainly agree that more attention should be paid to this simple method of prevention."

It is essential that a reasonable chance should be given to the cat. Where there are grain stores and mud walls more cats are required; where there is little food for rats and the walls are built with stone and lime a smaller number of cats will suffice.

Is Plague Infectious?

One writer has attempted to show that plague pneumonia is common, and that this form of plague is directly infectious from person to person. If that view is correct, then rat destruction can only be partially successful, and the employment of cats would not necessarily check the disease. In order to prove that plague pneumonia is infectious directly from person to person it would be necessary to exclude the possibility of infection having taken place in the house in which the first case occurred, or by a flea which may have been concealed in the clothes of the person who was suffering from pneumonic plague. If plague pneumonia is common, and if pneumonic cases are directly infective, we should expect to find epidemics among the attendants in a plague camp, but Browning Smith a few years ago drew attention to the prevalent opinion that one of the safest places during a plague epidemic is a plague camp, and that has been the experience of most medical men in India. Now we do occasionally hear of a nurse who has been attending on a plague patient getting an attack of plague, and Dr. Gimlette reports from Malay the case of a patient who was in hospital for rheumatism, volunteering to attend on a plague patient who had been brought to the hospital, and getting an attack of plague. But such cases can be explained on the supposition that a rat-flea had been concealed in the clothes of the first case. If the infection were conveyed direct we should expect to hear of a second, third, and fourth cases, but such an instance has not come to my notice. Ten years ago I accepted as a working theory—it was before the rat-flea theory had been proved—that plague pneumonia is directly infectious, but when a pneumonic case has been admitted to a plague hospital, or accidentally to the wards of a general hospital, I have always been agreeably surprised to find that no cases occurred among the hospital attendants. I do not say that direct infection never occurs, but I have never been able to find any clear and definite proof that it does occur. The point is one of great practical importance for many reasons, but all that we need concern ourselves with at present is that the commonly accepted view, that plague is mainly due to rats, is not upset by the statements of the writer referred to.

Is Plague Dying Out?

One reason why there has been so much delay in appreciating the value of the cat is the idea which is prevalent in many parts that plague is dying out; and the recent events in Nagpur may be referred to by way of illustration. The population of the city is about 120,000. In the years 1903–4 there was a severe epidemic with a mortality of 14,374. In 1905 there was a mortality of 5,165, and after that for a period of three years there was an absence of severe epidemics. Rat-catching was carried out for some time with considerable vigour, and frequently about 500 rats were caught in one day. A census of cats taken last year showed that the percentage of tamed cats to houses was only four—that is, one to twenty-five houses. The annual report of the municipality, which was issued about July, 1909, contained the words, "plague, like all epidemics, appears to have exhausted itself." A scheme for the introduction of kittens had been started, but it was too late. In August and September plague spread rapidly through the city and the mortality rose to the unprecedentedly high figure of 205 in one day, and 3,900 in one month. When, then, we see it stated that plague is dying out it would be advisable to inquire on what basis this opinion is founded. Rat destruction by traps and poison may succeed for a time, but the only permanent way to keep the numbers down in India, where there are, and for many centuries likely to be, so many houses with mud-built walls, is by the employment of cats. If the number of cats is sufficiently increased we can say for certain that plague is dying out. But plague might die out from one of two causes—one by a diminution in the number of rats, and the other by a diminution in the virulence of the plague germ. If the plague germ is less virulent we should expect to find the intensity of the symptoms less, but there was certainly not any diminution in the intensity of the symptoms, for it was the general opinion among the medical men in Nagpur that they had never seen, especially in the earlier days of the epidemic, so many cases die before there was time for the buboes to appear.

Cats versus Inoculation.

Probably nothing has more retarded progress in the acceptance of the cat theory in India than inoculation. It is now generally admitted that inoculation with Haffkine's serum is a good thing. During the fifteen months prior to my departure from India, I inoculated close on 10,000 persons, and I could give many illustrations to show the great advantage of inoculation. In Amraoti all the policemen were inoculated except one man, and that man was the only policeman who died. The forest officer's servant Kishen, Kishen's wife, and their two children lived in the same house. Kishen and his wife were not inoculated, and both died; the children were inoculated, and neither took plague. In Nagpur all the city police, a force of about 190, were inoculated except two men, and these two were the only men in the force who died from plague. In the Empress Mills, where over 5,000 hands are employed, we inoculated nearly all the workpeople. Among the uninoculated 90 died, whereas among the inoculated only 7 died, and most of these 7 were inoculated in the incubation period. Here are the results in eight houses in which some of the workpeople lived: There were 63 persons; cases occurred in each of the eight houses; of 36 persons who were inoculated, none died, while of the remaining 27 only 4 escaped. I could give many similar instances to show the great value of inoculation, and I fancy there are few men who have better reason for appreciating the greatness of Haffkine's discovery than I have, but I think it is better to try and prevent plague by getting rid of rats. A fire engine is good for preventing a conflagration, but it is better to prevent the risk of a conflagration by getting rid of the inflammable materials. Haffkine himself is a strong advocate of rat destruction, and I had recently* an opportunity of discussing the subject at Berlin with Professor Koch, who said: "You cannot stop plague by inoculation of man, for plague is a disease of rats, and if you want to get rid of plague you must attack the rat." There are some who seem to think that we should rely mainly on inoculation, but my view is that if in the intervals between epidemics efforts are made to instruct the people in regard to the necessity for keeping cats, and if facilities are afforded for the distribution of cats, the necessity for inoculation would rapidly diminish. Prevention is better than cure, and distal prevention by rat destruction is better than proximal prevention by inoculation. I have inoculated as many as 523 persons in one day, and it is perhaps only when one has done large numbers of inoculations that we begin to realize fully what a difficult task it would be to inoculate the enormous population of India—not once or twice, but every year when an epidemic comes. The Hon. W. Chitnavis, Chairman of the Nagpur Municipality, and also member of the Viceroy's Council, in a letter written last month, says that "the Nagpur people have come to realize the truth of your teaching, and I am sure they have even now showed ready keenness to possess cats. I know every time there is 'a breeding' of cats in my house I find that somebody steals them away. That in itself is a proof that cats are not despised, but that there is a demand for them."

* This letter was written prior to the late Professor Koch's fatal illness.

RAT DESTRUCTION BY TRAPS AND POISON.

Another thing which has tended to retard the due appreciation of the cat is the comparative success which has attended the efforts to remove rats by traps and poison. There are, however, many Hindus who object very strongly to the use of traps and poison, but even in the European quarter in Nagpur, where no such objection was met, it was found that, although rats could be cleared out by traps and poison, within a few weeks other rats would come in. It was only in those houses in which cats were kept that the rats could be kept permanently away. When plague began to spread in Nagpur we started what may be called the rat-hole inspection scheme. A number of inspectors were employed to go to each house, thoroughly inspect every nook and corner of the bungalows, and especially of the servants' houses, and to lay poison at the rat holes. After a few days the rat holes would be closed up, and if new holes were found poison would be laid again. As an emergency scheme this was very successful, but it is expensive.

PROFESSOR KOCH'S VIEWS.

Professor Koch has been for some years recommending the employment of cats for preventing plague, and in accordance with his suggestion the use of the cat is now being advocated by Kitasato in Japan. In the Public Health Reports of Japan (September, 1908), Kitasato gives a summary of Koch's views, and the following is an abbreviated extract from his report:

"The use of artificial methods like mechanical devices and poisonous drugs must prove laborious, expensive and at the same time comparatively inefficient; the limited powers of man are far inferior to the boundless resources of Nature. Examples: The *lantana*, a plant with pretty flowers, was introduced into the Hawaiian Islands, and after a few years caused great damage to agriculture. A small species of fly (*Agromyza*), which deposits its eggs within the seeds of the *lantana*, was introduced from Mexico, and in a few years the *lantana* showed signs of diminution. Second example: The sugar cane pest, a species of leaf hopper, in the Hawaiian Islands caused a loss amounting to several million dollars; an ant-like animal parasitic within the egg mass of the leaf hopper was introduced in 1904 and the sugar-cane pest was checked. Koch had experimented with the ichneumon of Egypt, the mongoose of India, and the common European ferret, but he found the cat most fitted for the task. The most useful things are often to be found among the most commonplace. An outline is given of a scheme for encouraging the keeping of cats, and attention is drawn to the necessity for providing holes, large enough to admit cats into rooms in which rats are likely to be found."

Professor Koch came to the conclusion that the cat is the best plague preventer in Africa, and his conclusion, taken with the fact that there is such a strong religious feeling, both among Mohammedans and Hindus, in favour of keeping cats, must surely strengthen very considerably the grounds for holding the view that the cat is the best plague preventer in India.

CATS IN MALAY PENINSULA.

Dr. Gimlette, in the *Journal of Hygiene* (April, 1909), refers to the fact that there has been very little plague in further India, and states that on this account considerable interest attaches to the small outbreaks which occur from time to time. "The keeping of cats," he says, "is a national convention which is common to other Mohammedan people, but in Malay the influence of folk-lore has an additional significance. The ancient superstitious faith of the Malays before their conversion to Mohammedanism seems to survive in the everyday treatment of their cats. In 1907 plague broke out among a gang of imported Javanese coolies who had been working on the Duff Development Concession. There happened to be no cats on the company's rubber estate, a fact which is interesting as giving negative support to Colonel Buchanan's hypothesis."

CATS IN OTHER COUNTRIES.

It would be interesting to know how far the failure of plague to get a hold in other countries could be accounted for by the presence of cats. Kitasato had a census of cats taken in various parts of Japan, and found that the percentage of cats to houses varied from 4 in Tokio to 49 in the Yamanashi district, where cats are kept specially to protect the silk industry from rats. Now in Tokio, after 4½ million rats had been destroyed, it was found that rats were still numerous. At the Bombay Congress Professor Shiga informed me that plague could never get a hold at Yamanashi. I think, then, that inquiries conducted on these lines would afford valuable evidence as to why one country or part of a country should escape, while another suffers from repeated epidemics of plague. Since plague began, the medical inspection of ships coming from India is gradually developing into a sort of tyranny, and the sooner people come to realize that a good supply of cats at the port towns and a few cats on ships are all that is required for preventing the spread of plague at seaports, the sooner will the discomfort which arises from the present system of inspection be abolished.

CONCLUSION.

Some time ago I ventured to predict that "a few years hence we shall look on the neglect of the cat as one of the most extraordinary things in the whole history of our inquiries into plague and its prevention," and already there are indications that this prophecy is beginning to come true, for we frequently hear people saying something like this: "If plague is a disease of rats, it is only plain common sense to check it by keeping cats." There are, however, still many parts of India where the value of the cat is not fully understood, and there is a tendency among some to think that plague is dying out. One of two courses is now open—one to trust to luck and to soothe our minds with the idea that plague is dying out; the other to leave nothing to chance, but to endeavour by every means to reduce the number of rats, and to impress on the people that of all the methods that have been employed for killing rats, and for keeping them away, there is none that can be compared with the rat-destroyer which has been provided by Nature—namely, the cat.

VICIOUS CIRCLES ASSOCIATED WITH DISORDERS OF THE URINARY ORGANS.

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AMONGST the complications of disease with which the physician is called upon to deal, vicious circles play an important part. Chronic disease becomes more chronic in the presence of this complication, and acute disease more acute; while the territory over which morbid processes play havoc is apt to be indefinitely enlarged. Indeed, it is not too much to say that a lethal exitus is frequently accelerated by, if not wholly due to, the reciprocally acting factors that have been called into action.

Although vicious circles are of such consequence in determining the duration as well as the issue of an illness, they have almost wholly escaped attention. No lexicographer appears to have defined what is meant by a "vicious circle" in medicine, and yet the complication meets us at every turn, and has to be taken into account in prognosis as well as in treatment.

Among the great systems of the body, the urinary system is of special interest, owing to the number and variety of circles met with. Illustrations of the mechanical, neurotic, chemical, organic, and symptomatic forms may be found in abundance, many of them possessing great importance.

The following topographical classification will be found convenient, although it cannot always be strictly adhered to:

I. Circles associated with the bladder and prostate.
II. Circles associated with the kidneys.
III. Circles associated with the ureters and urethra.

I.—*Circles Associated with the Bladder and Prostate.*

A striking example is presented by retention of urine caused by prostatic hypertrophy. The venous plexuses surrounding the prostate are always of ample size and undergo further dilatation in elderly men. This explains how it is that when, from some cause or other, congestion

of the prostate takes place, very considerable swelling of the gland results, sufficient in many cases to cause complete retention of urine. The accumulated urine in turn aggravates the venous engorgement, these two factors thus acting reciprocally on each other.

Desnos and Minet thus describe the mechanism of retention due to prostatic congestion:

On comprend dès lors comment la rétention s'opère: le volume des lobes latéraux augmentant brusquement les amène au contact; toute la glande elle-même est comprimée par les plexus périprostatiques: enfin et surtout la muqueuse congestionnée et oedématiée vient faire un bourrelet qui obstrue le col de la vessie; la muqueuse, plus friable, saigne au moindre contact d'une sonde. Pendant ce temps, l'urine s'accumule en arrière de ce bourrelet, distend la vessie. La pression du liquide dans ce reservoir augmente encore la stase veineuse, et l'oblitération cervicale devient invincible.[1]

Another circle may be caused by the retention in the bladder of residual urine occupying the region of the trigone. This residual urine often sets up vesical irritation and congestion, which aggravate each other. Thus Mansell Moullin writes:

The presence of residual urine and the straining and effort caused by the disadvantage at which the muscular coat of the bladder is placed do not allow the congestion to subside. A vicious circle is established, the irritability causing increased frequency, and the increased frequency making the congestion and irritability worse.[2]

Again, the muscular wall of the trigone is apt gradually to yield under the continual pressure, giving rise to a thin-walled post-prostatic pouch. When once formed, this pouch leads to further retention of urine, and this in turn to further bulging. Occasionally the pouch has attained such dimensions as to reach the perineum. In women a cystocele may be formed in much the same way.

In some forms of prostatic hypertrophy the enlarged lobe takes the shape of a valve which falls over and closes the vesical orifice as soon as the bladder begins to contract. The more vigorous the contraction the more tightly is the orifice closed; the tighter the closure the greater the contraction.

Sir Henry Thompson draws attention to a circle that is frequently present when catheterism, although imperatively demanded by an incapable and inflamed bladder, aggravates the inflammation.

The cystitis on the one hand, and the catheterism on the other, exercise mutually inimical influences, and the patient becomes the victim of a vicious circle of actions, in which an absolutely indispensable remedy, the catheter, aggravates the inflammation of the bladder, which therefore, in its turn, demands the instrument with increasing frequency.[3]

Where retention of urine has led to atony of the bladder, another reciprocal condition is set up, as pointed out in Keen and Da Costa's *Surgery*:

Prolonged or repeated retention, with overstretching of the organ, from any cause whatever, results in weakening of the detrusor muscles, reducing their contractibility and producing the condition called atony; while, on the other hand, atony itself contributes to further retention by reason of the inability of the weakened muscles to expel the urine. Thus is established a vicious circle that forms the intimate relation between the two conditions.[4]

Guyon draws attention to correlations that were common in earlier days when lithotrity was prolonged over several sittings. The cystitis called for lithotrity, while the resulting fragments of crushed stone increased the cystitis.

Autrefois lorsqu'on avait recours aux séances courtes et multiples sans chloroforme, . . . on abandonnait dans la vessie les débris de la pierre qu'on avait broyée. Ces débris plus ou moins anguleux étaient parfois d'un volume assez considérable. Aussi, à l'irritation que provoquaient directement les manœuvres et que n'atténuait aucune tentative d'anesthésie, s'ajoutait bientôt celle du contact de ces fragments, contact beaucoup plus offensif on le conçoit, que ne l'était auparavant celui du calcul tout entier. Ainsi se produisaient des poussées de cystite d'autant plus difficiles à prévenir et à combattre qu'elles étaient précisément provoquées par le véritable traitement curateur, et que ce traitement exigeait toujours un nombre plus ou moins considérable de séances. On était donc inévitablement condamné à tourner dans un cercle vicieux.[5]

Fürbringer describes a vicious circle present in acute prostatitis, the abdominal straining to pass water increasing the pressure on the urinary tract, and thus leading to a greater obstruction and straining.

Die in Folge der Dysurie angestrengte Bauchpresse übt einen unheilvollen Druck auf die entzündete Drüse, die ihrerseits die Harnröhre nur noch mehr comprimirt und die Qualen der Strangurie erhöht. Es können durch diesen Circulus vitiosus die Patienten . . . der Verzweiflung nahe gebracht werden.[6]

Some interesting reciprocal relations are established during the growth of a vesical calculus, whether such calculus descended from the kidney or was primarily formed in the bladder. If a small nucleus slips into a healthy bladder, provided that no infection occurs, just enough irritation may be provoked to surround the calculus with an envelope of mucus in which successive layers of crystals are deposited. The growth of the stone then proceeds in an acid medium, the film of colloid being ever ready to attract fresh crystals of uric acid or other substance out of the urine by molecular coalescence, while the enlarging stone keeps up the irritation and causes more and more mucus to be secreted.

Sooner or later, however, bacterial infection generally takes place, leading to cystitis and the precipitation of phosphates. Then the film of mucus becomes a nidus for the deposit of phosphatic accretions, and the growth of the calculus proceeds in an alkaline medium. The growing calculus increases the irritation, while the irritation leads to further deposits of phosphates and adds to the size of the concretion. A very similar vicious cycle of events is present when the concretion is *ab origine* a vesical one resulting from the deposition of phosphates.

Where bacterial infection supervenes in connexion with a calculus or otherwise a further circle is established, since the micro-organisms provoke ammoniacal fermentation and increased cystitis. Fresh pabulum is thus supplied to the invaders, adding to their powers of multiplication. Moreover, the alkaline salts formed during cystitis constitute a further source of irritation, as Skene points out:

The irritant effect of these salts, really deposits of foreign bodies, on the inflamed mucous membrane completes the vicious circle, the effect now aiding the original cause.[7]

A neurotic circle is occasionally met with in which impaired tone results from and also produces an irritable bladder. Reginald Harrison speaks of persons who, in view of an imaginary inconvenience they may be temporarily exposed to during a long railway journey, go on for days previously micturating every few minutes. They thus acquire a habit which becomes established.[8]

A somewhat similar neurosis due to exaggerated reflex irritability is met with in nocturnal enuresis. Some temporary derangement sets up nocturnal incontinence, and this, if frequently repeated, may so act on the impressionable nervous system of a child as to form a habit which may persist even after the removal of the exciting cause. Many such habit circles are met with in medicine.

II.—*Circles Associated with the Kidneys.*

The reciprocal correlations existing between the kidney and its fellow organs are so intimate that it is no wonder that vicious circles are readily established when disease attacks the system. A few examples will serve as illustrations.

When the blood is unduly charged with deleterious matters it impairs the nutrition and efficiency of the renal epithelium. Impaired nutrition and efficiency in turn keep the blood impure and so complete the circle. Adami describes the condition:

Functional inadequacy of the kidneys is not without its effect upon the composition of the blood. The quantity of water eliminated may deviate considerably from the normal, and waste products may be retained instead of excreted. The quality of the blood is thus depreciated, and, being laden with toxic substances, it in turn exerts an irritating and deteriorating effect upon the kidneys. In this way a vicious circle is set up, as a result of which the condition of the patient goes rapidly from bad to worse.[9]

Similar correlations involve the nervous, the digestive, and the vascular systems. Thus, the retention of toxic matters that should be eliminated by the kidneys injuriously affects the nervous system, and such disorder in turn increases the renal inadequacy. Or a lowered activity of the nervous system may be the primary factor, and induce a sluggish condition of the kidneys and other excretory organs, with a further reaction on the nervous condition. The digestive system may be affected in much the same way.

Again, in cardiac disease the kidneys may be gravely involved, and "the conditions form a vicious circle," as Brunton points out:

The disordered circulation disturbs the functions of other organs, and these in turn make the circulation worse. . . . The disordered circulation interferes with the functions of the lungs, liver, stomach, intestines, and kidneys. On account of the difficulty of breathing, exercise becomes impossible, and thus all the accessory aids to circulation given by the muscles and fasciae during movement are done away with. Appetite becomes lessened and flatulence increases; the elimination of waste products by the kidneys is interfered with, and distension of the abdomen either by flatulence alone or by flatulence with ascites, presses the diaphragm up, encroaches upon the breathing space in the lungs, and tilts the heart up, thus still further increasing its difficulties.[10]

Chronic renal disease associated with arterio-sclerosis is frequently complicated by a circle, although the exact part played by the kidneys cannot as yet be accurately defined. Modern pathologists regard arterio-sclerosis as a widespread process affecting both the renal organs and the arterio-capillary system generally, causing increased resistance to the flow of blood through the capillaries, and compensatory hypertrophy of the left ventricle followed by increased arterio-sclerosis.

Mott thus describes the process:

Arterio sclerosis affecting a number of vessels must lead to an increase of arterial pressure, which, reacting on the heart, causes hypertrophy; the two are progressively reciprocal, and although the cardiac hypertrophy is a necessary physiological compensation to overcome the increasing peripheral resistance, yet the high arterial pressure which it engenders leads to an increasing strain upon the walls of the aorta and arterio-capillary system generally. The arterial lesion may then be both the cause and effect of the hypertension.[11]

As Oliver expresses it: "It is not improbable that, in the manner of a vicious circle, a persistent rise of the arterial pressure may perpetuate itself."[12]

A bio-chemical view has recently been suggested—namely, that destructive changes in the renal epithelium cause an excess of an internal secretion from the kidneys (renin) to be cast into circulation and in turn to damage the renal tissues. Chauffard and Laederich write as follows:

Quoi qu'il en soit, il n'est pas douteux que les altérations ces cellules rénales peuvent être l'origine de substances toxiques, qui vont contribuer à entretenir ces altérations et créer à proprement parler un cercle vicieux, dont la résultante sera une prolongation plus ou moins indéfinie de la néphrite.[13]

A similar condition has been suggested as a possible cause of uraemia. Thus Garrod, in discussing the theories of that disease, says:

It has been suggested that the tendency to chronicity in renal diseases is due to the establishment of a vicious circle, and that the nephrolysins formed as a result of the renal lesions aggravate the morbid condition in the kidneys.[14]

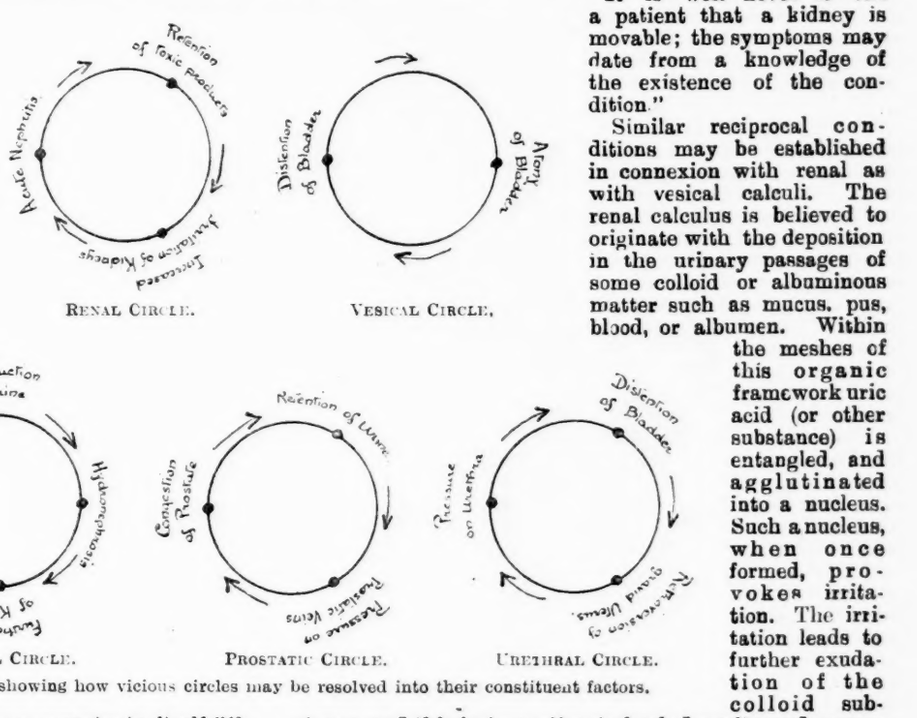
Both hydronephrosis and pyonephrosis may be complicated by reciprocally progressive conditions. An example occurs where undue mobility of the kidney is accompanied by twisting or kinking of the ureter, causing some obstruction to the escape of urine. As the renal pelvis and calyces become distended the whole kidney increases in size and weight and descends further in the abdomen, thereby aggravating the kink or twist and completing the circle.

Again, the insertion of the ureter into the hilum may be so high as to leave a pouch lying below the point of insertion and always full of urine. Cases are on record in which such pouch compressed the ureter, causing further distension and further compression. Valvular folds and other abnormalities may also at times lead to reciprocal conditions.

Shattock describes a circle in which hydronephrosis and polyuria are associated with idiopathic dilatation of the bladder, the obstruction arising not from organic changes but from disordered innervation. After discussing alternative theories he says:

Far more probably the polyuria results from the hydronephrosis, and there being a persistent obstruction a vicious circle arises, in which the hydronephrosis brings about polyuria and the resulting polyuria brings about a further increase in the hydronephrosis.[15]

In neurasthenic women a vicious circle is often established by a movable or floating kidney. The oversensitive nervous system renders the sufferer unduly conscious of the abnormal mobility, while the persistent ache keeps the nervous system weak and sensitive and further weakens it.[16] Osler thus expresses the idea: "It is well never to tell a patient that a kidney is movable; the symptoms may date from a knowledge of the existence of the condition."



RENAL CIRCLE. VESICAL CIRCLE.

URETERAL CIRCLE. PROSTATIC CIRCLE. URETHRAL CIRCLE.

Diagrams showing how vicious circles may be resolved into their constituent factors.

Similar reciprocal conditions may be established in connexion with renal as with vesical calculi. The renal calculus is believed to originate with the deposition in the urinary passages of some colloid or albuminous matter such as mucus, pus, blood, or albumen. Within the meshes of this organic framework uric acid (or other substance) is entangled, and agglutinated into a nucleus. Such a nucleus, when once formed, provokes irritation. The irritation leads to further exudation of the colloid substance, and this in turn attracts fresh deposits and causes fresh irritation. Secondary renal calculi, on the other hand, result from an infective process in the kidney, generally associated with stagnation of the urine. Under such conditions phosphates are readily precipitated, the resulting concretion forming the nucleus of a calculus. This nucleus in turn causes irritation of the mucous membrane and the exudation of muco pus, and this readily gathers about itself fresh phosphates. Renal infection often leads to a primary renal calculus at a later stage being incrusted with phosphates.

An accumulation of urine in the bladder, if at all considerable, may affect the renal secretion, as a result partly of reflex action, partly of mechanical tension. The accumulation of urine increases the renal secretion, which increase in turn aggravates the accumulation.

In severe cases of ascites a mechanical circle is sometimes formed. The pressure of the ascitic fluid in the kidneys and renal vessels diminishes the secretion of urine. This diminution in its turn aggravates the ascites.

III.—*Circles Associated with the Ureters and Urethra.*

The ureters and urethra have already been referred to more than once as co-operating with the bladder and kidneys in the formation of circles. But there are times when the ureters or urethra play the principal part.

The Ureters.

For example, the opening of the ureter into the bladder may be abnormally small, impeding the flow of urine, and

giving rise to a sacciform dilatation. This dilatation may in turn further diminish the opening, and thus complete the circle.

Again, a renal calculus in its progress towards the bladder may lodge in and block the ureter, leading to inflammation and ulceration of the mucous membrane. This may aggravate the obstruction, and, owing to stagnation of urine, cause an increase in the size of the stone.

Matthews Duncan draws attention to a curious condition in which obstruction of the ureters due to polyuria provokes frequent micturition, and this in its turn increases the obstruction.

Frequent urination, he says, leads to obstruction of the ureters at their vesical orifices, and partial obstruction of the ureters leads to excessive secretion; the excessive secretion requires frequent emptying; the frequent emptying produces obstruction of the ureters; and the obstruction of the ureters leads to excessive secretion, and so on.[18]

The Urethra.

The obstetrician at times meets with a circle caused by a retroverted gravid uterus pressing on the urethra, and thus leading to retention of urine and increased retroversion. At other times the retention of urine is the primary and the retroversion the secondary factor. Pouliot thus describes the circle:

La rétroversion, une fois constituée, apporte un obstacle à l'émission de l'urine si bien que dans la majeure partie des cas un cercle vicieux se trouve formé. La vessie en ne se vidant point, projette l'utérus en arrière; celui-ci se prolabant dans le cul-de-sac de Douglas s'oppose à la miction et seule une évacuation artificielle de la vessie peut mettre un terme aux accidents.[19]

In acute gonorrhoea the urethral mucous membrane may be so inflamed as to lead to retention of urine. Such retention in turn aggravates the congestion of the lower urinary tract and increases the urethral obstruction. The more prolonged the retention the greater the swelling of the mucous membrane, and vice versa. The severe straining associated with tight strictures and with retention sets up a similar hyperaemic condition of the urethra and aggravates the stricture.

Again, with congenital or other strictures of the urethra it is not uncommon to find extensive retro-strictural dilatations. These dilatations contain decomposing urine, and sometimes a calculus, and may be so situated as to further press on the strictured urethra, or to provoke dysuria. Thus the dysuria is both cause and result of the dilatation.

The accompanying illustrations show how vicious circles may be represented diagrammatically, the number of factors varying with the complexity of the condition.

CONCLUSION.

It is interesting to note that many circles arise from a failure of those beneficent powers with which the body is provided for the purpose of counteracting disease.

Thus in cases of chronic prostatic obstruction the walls of the bladder undergo considerable hypertrophy with the obvious intention of overcoming the obstruction. Such hypertrophy is compensatory and beneficent. But if the demands are excessive, the limit of compensation is reached and the hypertrophy is replaced by degeneration and atrophy. In this case the advantage becomes disadvantage and a vicious circle is established.

In cases of cystitis associated with the presence of a calculus the formation of ropy mucus and the deposit of phosphates is probably a conservative process intended to encase the irritating calculus and thus to shield the vesical walls from injury. But the opposite effect often follows, since the deposited colloids and phosphates lead to the growth of the calculus and thus increase, instead of lessening, irritation.

Where a heavy hydronephrotic kidney takes up a lower position in the abdomen, the constant ache that resulted from the dragging on the ligaments may be relieved and the movements become less irritating. But if such descent leads at the same time to kinking of the urethra, the benefit vanishes, since the displacement causes the hydronephrotic kidneys to increase in size and to cause more and more disturbance.

Lastly, where in cases of obstruction to the passage of urine renal secretion is increased, owing to reflex action, the increased flow is probably intended to wash away the obstacle, much as a foreign body lodged in the cornea calls forth increased lacrymation. But if the increased flow of urine fails to remove the obstacle, its effect is but to increase the accumulation of urine and thus intensify the mischief.

Although the list of vicious circles is far from exhausted, sufficient illustrations have been given to show the importance of being on the *qui vive* for this possible complication, and of breaking the circle by any means whatsoever. The appropriate treatment will be found in every textbook, but as a general rule vigorous measures are called for, in view of the increased gravity of disease when complicated by a vicious circle.

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TREATMENT OF SMALL-POX IN RED LIGHT AND IN THE DARK:

SOME PRACTICAL REMARKS.

BY C. H. WÜRTZEN, M.D.

(From the Medical Department (Professor Feilberg) Øresundshospital, Copenhagen.)

FINSEN in his pioneering works from 1893[1][2] lays down his method for the treatment of small-pox by exclusion of the chemical rays of daylight, and in January and February, 1894, a slight small-pox epidemic gave Feilberg[3] the opportunity of using it in my country. The method has later been used in the Øresundshospital on every occasion.

As is known, one tries to carry through the method generally by arranging a red room. This is done either by covering all windows with several layers of red stuff (bookbinder-shirting, flannel, blankets, and the like) or by furnishing the windows with red glass or by combining both proceedings. If the stuff is closely woven, the layers not too few, and if the hangings fit closely to all sides, all demands will be fulfilled; but in this case little light passes, and in consequence the room will be rather dark. The strongly subdued light is, however, more often a comfort to the patients at the beginning of the illness, nor is one justified in objecting that the dark or the red light interferes with the examination of the patients, because the physician must get used to judging the eruption by the peculiarities in appearance which are due to the light.

Red panes set in loose frames may be hung outside—or, having regard to the durability of the colour, preferably inside; these panes have the advantage that for the greater part of the day there is sufficient light in the room to allow the patient to read. But the panes of glass present in themselves a danger. Red glass in strong sunshine does not always exclude the green rays, and only glass which on spectroscopic examination has been proved to be faultless in every way should be employed; to choose glass whose colour is as intensive and as dark as possible will give little or no guarantee that it is satisfactory. Spectroscopic examination is absolutely necessary. It must also be noted that red glass which at one time was correct fades when kept, even if it has been used only for a comparatively short time and has been kept in a rather dark store-room, with the single frames placed close together. This is not surprising, since there is only a very thin layer of colour on common glass. Durability would be increased if glass through which the colour is diffused were used, but the price is so much higher that in practice it is necessary to make use of the cheaper ware. I cannot say how long the latter retains its good qualities, as there is no date on the hospital panes of an earlier period showing when they were procured. After having examined the whole stock of panes—which, for the moment, consists of 45, and of which some were in use—I found only 24 faultless. Of the remainder, 8 allowed a very small quantity of green rays to pass, but this

even if it be inadmissible from a theoretical point of view (cf. Bie[4]), is of a very little practical importance, whilst 13 also allowed other colours of the spectrum to pass, and were therefore useless. The examination was made in the beginning of February in bright sunshine. In future it will be necessary to examine the stock at shorter intervals. It would seem, therefore, that the Finsen treatment with red panes must be reserved for hospitals which are always able to have their supplies in order. Where the arrangements are on a smaller scale the use of stuff will be advantageous. Or still better, one might advance another step by carrying on treatment in the dark. This idea is far from being new. From 1867 and 1871 we have reports on cases of small-pox treated in the dark (Black,[5] Waters,[6] Barlow[7]). Finsen based his opinion of the special inflammatory qualities of the chemical rays in variola on the fact that the most numerous and the deepest scars are generally found on the face and hands—that is, on the parts most accessible to light—and treatment in the dark only differs from treatment in red light by the fact that all other rays are excluded as well as the chemical. No objection can be made against treatment in the dark based on the idea that there is any positive advantage in the use of red light, either in its influence on the eruption or on the general condition. This treatment in the dark, as well as its results, were not unknown to Finsen, and he quoted and found support for his views in the above-named English authors.

Finsen[8] pointed out that some people seem to have an aversion to red light, and added: "I wish, moreover, to draw attention to the fact that now when the method (that is, the red light) has everywhere stood the test, it ought to be the doctor's first duty, as soon as he has diagnosed small-pox, to see that the windows of the sick room are covered, and that there is a light. Seeing that the treatment may be so easily arranged, it is really indefensible to expose the patients to daylight until they can be exposed to red light in the hospital. This indication, which specially concerns the early time, can be prolonged during the whole period, that is, until the vesicles dry up, etc., and it may be taken for granted that patients who have had a severe attack, and especially those whose eyes are affected, will not feel this treatment as particularly rigorous."

It may not be out of place to draw attention to certain conditions which must always be present if the treatment is not to disappoint expectations.

In the first place, the arrangements ought not to be limited to the sick room, but account should be taken also of the adjoining rooms, passages, etc., so that no great quantity of injurious daylight should be thrown on the patient in opening the door of the sick room. All sources of artificial light must be covered with red lamp-glasses, such as photographers use, and when doctors and nurses in their rounds think it necessary to use ordinary light, it ought only to come from a stearine candle, of which the flame contains so few chemical rays that no harm is done if used only for a short time. It therefore follows as a matter of course that even for a short time, and in order to see the exanthem better, daylight ought not to be admitted freely.

Finally, there is the question as to how the red light affects the patients—apart from their illness—and the staff generally. Nothing is known of its remote effects, but the reaction to it seems to be somewhat different. Some do not seem to be appreciably influenced, while others find it rather unpleasant in the long run, and some get an absolute aversion to it. It often produces a feeling of heaviness and headache, and it is always found exhausting and tiring for reading; on the other hand, we have not noticed any mental excitement or increased sensuality, as is said to have been the case elsewhere. Naturally the red light produces a strong sensitiveness in the retina to ordinary daylight. This hypersensitiveness is very troublesome and confusing to the nurses, who of course are obliged to go backwards and forwards between the red-room and the daylight. To mitigate these drawbacks—and in a red-room the light on bright days is very intense—coloured spectacles may be used with advantage. Green and blue glass each in their own way considerably modify the light and produce different shades, of which some will prefer one, others another; and with smoked glasses a chiaroscuro is obtained, which gives great relief. Contrary to what might be expected, neither the blue, the green, nor the smoked glass, provided they are not very dark, cause any considerable weakening of the light in a red-room.

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RECOVERY FROM APPARENT ARTERIAL SCLEROSIS.

By W. M. CROFTON, M.B.R.U.I.,

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I saw the patient first on August 6th, 1909.

Previous History.

The patient, aged 60, was manager of a large commercial concern, and in this position had led a strenuous life for twenty-seven years, having been at sea before that for eleven years. He had always been strong and healthy up to twelve months before his present illness, except for slight attacks of bronchitis in the winter, which did not lay him up for more than a few days. He had met with an accident to his legs in 1905, which had laid him up for a fortnight. There was no history or sign of syphilis, and he had always been moderate in the use of alcohol and tobacco. His family history was good.

History of Present Illness.

The first sign he had that there was anything wrong was a sudden feeling of breathlessness and palpitation while running for a train in the autumn of 1908; after that he took care not to overexert himself physically. In the spring of 1909 he had a severe attack of bronchitis, which he was unable to shake off completely, and after it he found he could not exert himself at all without palpitation and breathlessness. He consulted a specialist, who diagnosed cardio-sclerosis and ordered him a sea voyage. He went to Las Palmas, where he unfortunately had a severe attack of dysentery, and returned home in a very weak state.

Condition on Examination.

He was a tall, spare man, and complained of feelings of exhaustion and pain over the heart and palpitation and dyspnoea on exertion, of tenderness of the eyeballs, and of a feeling of weight or pressure across the top of his head. He was in the habit of wearing one pair of pince-nez for reading large print or for writing, supplementing them by a second pair for reading small print. He suffered much from flatulence, and had feelings which he described as waves of pins and needles passing down his back and limbs which could be induced by a deep inspiration or by yawning. He also described "bubbling" sensations in various parts of his body which were caused by localized series of contractions of bundles of fibres of a muscle. The lower sternum was depressed (funnel breast). The apex beat, in the sixth interspace and nipple line, was somewhat heaving. There was also marked epigastric pulsation. The first sound was softened, the second a little accentuated. His radial pulse was soft and the artery wall not more thickened than was to be expected in a man of his years. There was marked acceleration of the pulse-rate on deep inspiration and slowing on deep expiration. Capillary pulsation was observable. The breath sounds were normal. There was a line of dilated venules along the margin of his ribs. The urine was normal in quantity, rather high coloured, contained a large amount of urates, and a trace of albumen, but no sugar.

As his general symptoms, especially the feeling of weight across the top of his head and soreness of the eyeballs, were typical of a case of neurasthenia due to errors of refraction, I sent him to Mr. Claud Worth, from whom I received the following report:

"The patient has 4 D. of presbyopia in the right eye, 4.5 in the left. Retinal arteries are very small and tortuous. Central light streak very wide. Where an artery crosses a vein the latter is so compressed as to be apparently interrupted. No retinal oedema. No haemorrhages."

Treatment.

The errors of refraction were suitably corrected, and on Trunecek's hypothesis that arterio-sclerosis is due in some cases to nutritional disturbances in the artery wall, partly owing to exhaustion of the vasomotor nervous system and partly to lowering of the food-carrying and eliminative powers of the blood from a diminution of its salt content caused by auto-intoxication, he was given the salts of Trunecek's serum, slightly modified. They were dispensed in the form of tablets, each containing sod. chlor. 0.4 gram, sod. sulph. 0.04 gram, sod. carb. 0.016 gram, sod. phos. 0.012 gram, mag. phos. 0.016 gram, calcium glycerophos. 0.012 gram. He took two tablets three

times a day, and also took miol, a combination of olive oil, iodine, and glycerophosphates. The iodine in this would relieve arterial spasm, and the olive oil, besides being a good fattening food, would tend to dissolve out any cholesterin, which has been said to be deposited in the arterial walls in arterio-sclerosis. The glycerophosphates would act as a nerve food. He had a strong brine bath every morning and an occasional dose of sodium sulphate before breakfast.

He gained rapidly in weight and strength under this régime and gradually became able to extend his daily walks without undue fatigue or cardiac distress. At the end of ten weeks he was able to go for a long walk and to climb a stiff hill. The miol had then to be stopped for a time owing to the iodine in it causing swelling of the eyelids and congestion of the conjunctivae. He returned to work at the end of three months.

Early in January, 1910, he again saw Mr. Worth, who reported as follows: "Retinal arteries are larger and have lost the 'silver wire' appearance. The appearance of interruption of the veins is much less marked." In fact, he told me that the arteries appeared about normal for a man of the patient's years.

The patient continued the treatment on and off for some months and now takes sour milk, which he finds has greatly diminished his flatulence. He is now (June) in good health and able to do his work without undue fatigue. The trace of albumen entirely disappeared.

One could hardly have expected such an excellent result; the arrest of the sclerosis was all that could have been reasonably hoped for.

The question is, what stage of hardening had the retinal arteries reached? The stages of hardening of the wall of an artery are roughly as follows: First, hypertrophy of the media; secondly, small round-celled infiltration, especially between the endothelium and internal elastic lamina; and thirdly, degeneration of the newly-formed elements and their replacement by fibrous tissues with deposits of lime salts, etc.

It is conceivable that the vessels might recover from the first two stages—that is, that the small round-celled infiltration might disappear and the amount of muscle in the media might be reduced, but it is inconceivable that the vessels could recover if the change had gone beyond this. It is therefore probable that the retinal arteries of the patient were in this second stage. Whether the arteries of the other organs—for example, those of the heart and kidneys—were in the same state it is, of course, impossible to say.

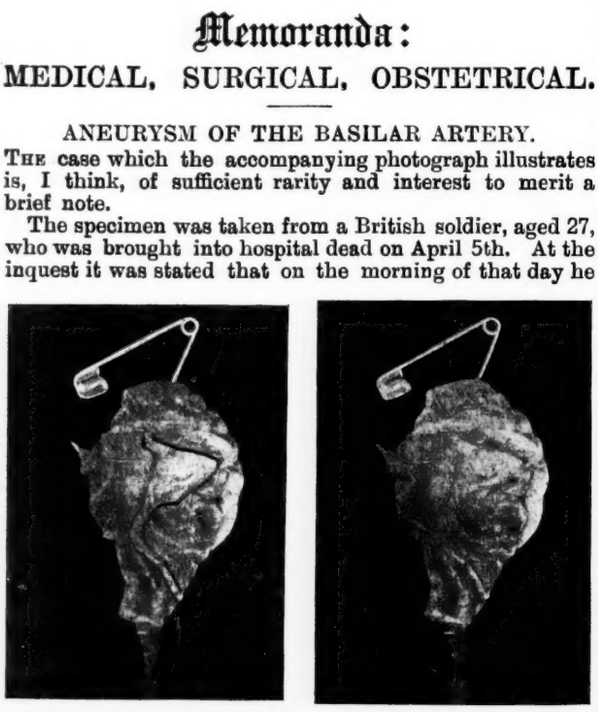
Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

ANEURYSM OF THE BASILAR ARTERY.

The case which the accompanying photograph illustrates is, I think, of sufficient rarity and interest to merit a brief note.

The specimen was taken from a British soldier, aged 27, who was brought into hospital dead on April 5th. At the inquest it was stated that on the morning of that day he



complained of headache, and obtained permission to leave his work and return to barracks. Nothing abnormal in his gait or demeanour had been noticed by his comrades. It would appear that he left barracks to return to duty about an hour later; but he never reached his post, and was found dead by a native, who at once reported the occurrence.

The following is a brief extract of my *post-mortem* notes:

The body is that of a well-nourished and muscular male, and shows no evidence of any violence. The lower third of the front aspect of the left thigh is the seat of a number of shallow, circular, punched-out confluent ulcers, varying in size from a sixpence to a five-shilling piece. There is both cicatrization and pigmentation, but healing is sound. Two other similar ulcers are present on the front of the right forearm and several on the back.

Thorax.—Heart, coronary arteries, and aorta are normal.

Abdomen.—Nothing abnormal.

Cranial Cavity.—The right cortex is the seat of an extensive recent subpial haemorrhage, which is also present to a lesser degree over the left, where it has not quite reached the vertex. The pia mater has not been ruptured.

The interpeduncular space is bathed with recently-exuded blood, and on removing this the basilar artery, just behind the point where it bifurcates into the posterior cerebral arteries, is seen to have expanded into an aneurysmal sac the size of a hazel nut. The sac is empty, and a small probe can be passed into the puncture at its anterior extremity. The left half of the pons which it underlies shows slight flattening.

The other cerebral arteries are normal. Both ventricles are full of blood.

The medical history sheet states that the man contracted syphilis in Ireland in 1902, and was treated in hospital there. As recently as January and February of the current year he was treated here for tertiary cutaneous manifestations, but refused to go on the register for a complete course of treatment, as he was time-expired and about to return to England.

Rawal Pindi, Punjab. H. C. Semon, M.R.C.P., I.M.S.

Reports

ON

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF THE BRITISH EMPIRE.

ST. GEORGE'S HOSPITAL.

RHEUMATIC NODULES ON THE EXTERNAL EARS.

(By H. D. Rolleston, M.D., F.R.C.P., Senior Physician to the Hospital.)

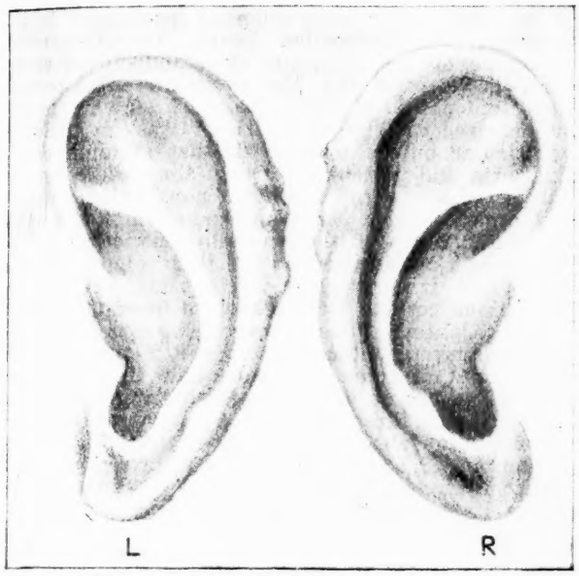
A man, aged 21, who had had rheumatism, pleurisy, and pneumonia nine years before, was admitted on March 10th, 1910, with pains in the joints of three weeks' standing and signs of mitral regurgitation.

After a few days he showed signs of pericarditis with effusion, followed by double pleurisy with effusion; these signs persisted. On May 26th he had pericardial pain, and on May 30th well-defined rheumatic nodules were noticed on the outer and posterior surface of the helix of the left ear, near the position of Darwin's tubercle. They were painless and not tender, but the patient said he had noticed them as rather irritating pimples six weeks before. A nodule was also noticed on the helix of the right ear. On June 3rd two additional nodules were noted on the right ear and three nodules over the occipital bone, and a number of nodules over the extensor tendons on the back of the hands. On June 4th two additional nodules were noted on the helix of the left ear and also a nodule on the external condyle of the right humerus. During this time the patient was perspiring freely, but there was no rise of temperature.

On June 10th the nodules were diminishing in size.

Remarks.—The occurrence of rheumatic nodules on the ear is evidently rare, as it is not mentioned in the articles on rheumatic fever in two contemporary systems of medicine. Dr. John Thomson, however, figures rheumatic nodules on the auricle. In their tabular statement of 27 cases of rheumatic nodules Sir Thomas Barlow and Dr. Warner describe one case, in a boy aged 15, with three rheumatic nodules, each the size of a hemp seed, on the posterior surface of the pinna of the right ear; there were

no nodules elsewhere. They also refer to a case, reported by Troisier and Blocq, in a man aged 45, who, in a third attack of rheumatic fever accompanied by double pleural effusion, had, two months after admission, pericarditis followed by a nodule in each ear. This case resembled mine in several respects; in both the patient was an adult, in whom rheumatic nodules are less often seen than in children, and in both the nodule occurred in a prolonged rheumatic attack which was characterized by double pleurisy with effusion and pericarditis. The association of visceral complications strongly suggests an anatomical lesion in the serous membranes similar to the subcutaneous rheumatic nodules. It is noteworthy that



The external ears, showing rheumatic nodules.

these rheumatic nodules appear on the outer and posterior surface of the pinna, and so differ from gouty tophi, which usually affect the inner surface of the helix. For the illustration I am much indebted to Mr. W. E. Waller, B.A.Oxon.

Probably rheumatic nodules on the ears would be more commonly noted if systematically looked for. I have lately seen a nodule on the posterior surface of the left ear of a boy, aged 5 years, admitted to the Victoria Hospital for Children with chorea and pericarditis. There were numerous nodules on the back of the head and over the left elbow. The child died, but a necropsy could not be obtained.

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Troisier and Blocq, *Rev. de méd.*, Paris, 1881, I, 297.

Reviews.

DR. WOODS HUTCHINSON is an American who has already many friends in this country, and the number of these should be indefinitely increased by his delightful book on *Instinct and Health*.[1] Dr. Hutchinson seems, in George Moore's beautiful phrase, "to blow a horn on the hillside to call comrades together." His book is like the call of a hearty man in a land filled with the cackle of quacks and faddists, and the querulous pulings of professional invalids. His main thesis is that on the whole "instinct," which after all has been at work for unknown millions of years in developing the human species, is still what Bishop Butler called probability—"the very guide of life." Instinct, he tells us, "hasn't been crystallizing for five million years for nothing. Reason was only hatched yesterday, and has the boundless confidence of youth. It is always trying to improve upon Nature—sometimes successfully, sometimes not." It is only fair to our author to mention that this remark is made in connexion with diet, and is not meant to be applied quite generally. The first chapter is a glorification of the human physique, and is full of familiar things put so freshly and vividly that they seem almost to be new discoveries. Thus we are shown the fallacy of supposing that because man has not the speed of the deer, the strength of the horse, or the teeth and claws of the tiger, he is a feeble and inferior sort of animal. On the contrary, it is to this very avoidance of specialism that he owes his position in Nature, for "man has kept nearly all his teeth, all his toes, all his fingers, instead of losing from one-third to two-thirds of them, as other animals have, in order to develop specially those that are left." At the same time he has developed an adaptability to climates and a power of assimilating almost any kind of food, which has given him a "range of distribution" on the earth with which that of no other animal can compare. Developing this theme, Dr. Hutchinson proceeds to the demolition of all sorts of cherished beliefs, among others the physical superiority of the savage to the civilized man, and of the rural dweller to the town dweller (not slum dweller). Much of this carefully elaborated efficiency is now, Dr. Hutchinson says, being threatened by our self-consciousness, our fears, and our fads. "Health will take care of itself, disease must be cured at once. A healthy man doesn't know that he has such a thing as a stomach, a dyspeptic doesn't know that he has anything else." For the rest the author runs an exhilarating tilt against fads and superstitions, quackery and cultivated invalidism, leaving the reader convinced and refreshed, even if sometimes a little out of breath. His arraignment of the abuse of patent foods, of vegetarianism, and all forms of "freak-feeding," is based on an array of well-marshalled facts, and the chapters on sleep are full of wisdom. Incidentally Dr. Hutchinson, following out a suggestion made in this JOURNAL a good many years ago, questions whether early rising is after all a virtue. He might, however, follow out the subject a little further, for to him it is merely a survival from "hard-fisted agricultural ancestors, whose work had to be done in the daylight." Not the least charm of the book consists in the fact that it contains so much from which each individual reader will differ. But no one will read it without a sense of healthy stimulation and the opening up of new tracts of thought.

[1] *Instinct and Health.* By W. Hutchinson, A.M., M.D. New York: Dodd, Mead and Co. 1908. (Post 8vo, pp. 334. $1 20.)

NOTES ON BOOKS.

Malaria and Mosquitos,[2] by Major R. J. BLACKHAM, D.P.H., R.A.M.C., should prove of value to the laity, soldiers or civilians, in India. It was written at the request of Lieutenant-General Sir James Willcocks, and was expanded from a lecture on malaria and mosquitos delivered before the officers, non-commissioned officers, and men of the First Peshawar Division. The pamphlet is written clearly and simply, and it should prove of value not only to people in India, but in other parts of the world as well. A good account of the phlebotomus or sand-fly is given, and the crucial points in regard to malaria are fully entered upon. It is only by pamphlets of this kind that we can hope to get at the great mass of non-scientific people residing in our tropical dependencies, and Major Blackham's brochure is therefore welcome and can be thoroughly recommended.

[2] *Malaria and Mosquitos.* By Major R. J. Blackham, D.P.H.Lond., R.A.M.C., Barrister-at-Law, Divisional Sanitary Officer. With a Preface by Lieutenant-General Sir James Willcocks, K.C.M.G., C.B., D.S.O., Commanding the First (Peshawar) Division, Indian Army. Lahore: Printed at the "Civil and Military Gazette" Press by Samuel T. Weston. 1910.

MEDICAL AND SURGICAL APPLIANCES.

A Safety Razor.

THE Durham-Duplex safety razor differs from other safety razors which have recently come so extensively into use, inasmuch as the detachable blade is carried on an arm mounted in a handle of the same form as in the ordinary or old-fashioned razor. The Durham-Duplex razor is well guarded, so that an accidental cut seems almost impossible, while to many who have been in the habit of shaving themselves for years it will present the advantage that it can be used in the way to which they are accustomed in rounding corners and negotiating wrinkles. It will be also useful in preparing patients for operation, for while it will shave closely, there is little risk of an accidental wound. It is supplied by the Durham-Duplex Razor Company, Cecil Chambers, 86, Strand, London, W.C.

SEVENTY-EIGHTH ANNUAL MEETING
OF THE

British Medical Association.

in London on July 22nd, 23rd, 25th, 26th, 27th, 28th, 29th, and 30th.

THE SECTIONS.

BRIEF SUMMARY OF PROCEEDINGS.

SECTION OF ANAESTHETICS.

THE proceedings were opened by Dr. Frederic Hewitt, the President, who said he believed that the inauguration of the Section had taken place at an opportune moment, marked by the commencement of a new era in anaesthetics, the era of precision. A discussion on the dosimetric method of the administration of chloroform was introduced by Dr. Dudley Buxton, who in the course of his remarks emphasized the importance of a known definite percentage of chloroform for the induction of surgical anaesthesia, the safe limits lying between 1 and 2 per cent. of chloroform vapour in air. Professor Waller, in an interesting speech, contrasted the efficiency of the various forms of apparatus designed for the administration of definite percentages of chloroform. He said that it was necessary to have at heart as an object the diminution of the death-rate under anaesthetics, whatever the method employed. Mr. Alexander Wilson, Dr. Scharlieb, and others spoke of the advantage of a method by which a known percentage of chloroform was administered.

At the second meeting of the Section Mr. H. Bellamy Gardner read a paper on the open method of the administration of ether. He laid stress upon the value of the method in suitable cases, and hoped that enthusiasm for a novelty would not cause it to be adopted in unsuitable cases, and so bring the method into general discredit. Dr. Flemming thought "open ether" very useful, and also described a "two-bottle" method by which ether and chloroform in separate drop bottles were administered upon the same mask. Mr. H. J. Paterson spoke highly of "open ether" from a surgeon's point of view. Other speakers differed on points of detail, but were generally agreed that the method was a safe and useful one. Mr. Rowell opened the discussion on surgical shock. He pointed out the advantage of ether as a preventive of shock, and contrasted it with chloroform. Professor Crile and Mr. Lockhart Mummery spoke on the surgical aspect of the prevention of shock; while Professor Leonard Hill treated the subject from the physiological point of view.

At the third meeting Dr. Blumfeld opened the discussion on spinal analgesia, and spoke of the advantages attached to this form of analgesia under certain circumstances; he also quoted a large number of statistics bearing upon the relative safety of the method. A paper by Mr. Canny Ryall was read; Mr. Tyrrell Gray spoke of the advantage of the method in children; and Professor Morison quoted a number of cases. The question as to the advisability of legislation with regard to the administration of anaesthetics was introduced by Dr. Hewitt. Mr. Digby Cotes-Preedy discussed the matter from a layman's point of view; while Sir William Collins pointed out that there was a close relation between unqualified practice generally and the unqualified administration of anaesthetics. Finally the President proposed the motion:

> That this Section approves the resolution of the General Medical Council and of the Departmental Committee of the Home Office respectively, and recommend the Council of the British Medical Association, on behalf of the Association, to take such steps as they may think desirable to represent to the Privy Council and to the Home Secretary the need for the proposed legislation in the interest of the public safety.

This was carried unanimously, and the proceedings terminated.

SECTION OF ANATOMY.

Thursday, July 28th, 1910.

DR. R. J. GLADSTONE showed (1) a fetal lamb in which there was a median cyclopian eye, fusion of the two external ears across the middle line, and absence of the lower jaw. The thoracic and abdominal viscera were normal. (2) An anencephalus with facial cleft, meningocele with elongated pedicle, and cleft palate. Professor Fawcett and Mr. Frazer took part in the discussion which followed. Dr. Ivy Mackenzie gave an account of some researches on the anatomy of the bird's heart. The speaker pointed out that Dr. Jane Robertson, working on the heart of the reptile, bird, and mammal, had found that the electrical reactions in the bird's heart were different from those in the reptilian and mammalian heart. Dr. Mackenzie's researches showed that, from the standpoint of structure, the heart of the bird again presented certain important points of difference. These were briefly summarized as follows: (1) There was no auriculo-ventricular bundle of His; (2) that situated round the aorta and pulmonary artery there were certain nerves which terminated in glomerular masses, end organs, which were non-ganglionic; (3) that round the bases of the auriculo-ventricular valves there was a continuous mass of ill-developed muscle fibre which, it was suggested, might be the remains of the bulbus cordis. Dr. Rutherford demonstrated by means of lantern slides an interesting case of absence of the transverse meso-colon. Mr. P. T. Crymble gave an account of some researches on the muscle of Treitz, based on observations of twenty-three subjects. It consisted of three parts: (1) A lower part composed of smooth muscle attached to the termination of the duodenum; (2) an intermediate part or tendon, fibro-elastic in structure; and (3) an upper part proceeding to the right crus or to the diaphragm at the lower part of the oesophagus, but never to the left crus, composed, like the diaphragm, of striated muscle. The so-called "ligament of Treitz," better named the plica duodeno-jejunalis, enclosed the muscle of Treitz. An interesting discussion followed, in which Professor Symington, Dr. W. Wright, Professor Keith, Professor Waterston, and Dr. Rutherford took part. Professor Ramstrom of Upsala read a paper on Emanuel Swedenborg as an anatomist. A discussion next took place on methods of preservation of anatomical material, in which Professor Reid, Professor Waterston, Professor Symington, and Mr. F. G. Parsons took part. After the suggestion that the different methods advocated by the various speakers and other anatomists should be collated and submitted to a committee had been made, the discussion was adjourned to Friday morning, and Dr. Scanes Spicer read a paper on the normal orthograde posture. Drawing attention to the importance of posture in connexion with physical drill, voice production, singing, etc., Dr. Spicer endeavoured to fix a normal axis of the body which should be absolutely vertical, slanting neither forwards nor backwards. The paper was criticized by Professor Keith, Professor Robinson, and Professor Peter Thompson, after which the Section adjourned.

SECTION OF DERMATOLOGY.

Thursday, July 28th, 1910.

[A REFERENCE should have been made to the address of the President (Dr. P. S. Abraham) on the opening day, when he reviewed the work to be done and welcomed the members of the Section and the visitors.] On Thursday Dr. Bulkley of New York opened the discussion on the influence of diet in diseases of the skin. His paper, which went into numerous and minute details, cannot very well be summarized here. It may be said that he showed himself a firm believer in the beneficial results of diet. Dr. Unna of Hamburg had no experience of the effects of diet, for patients who came under his care had gone through diet treatment and wanted something more. Dr. Hartzell of Philadelphia did not lay great stress on diet, and did not agree with Dr. Bulkley. Dr. Wild of Manchester went very fully into the matter, and, although agreeing with many points

in the opener's paper, he could not follow him as to psoriasis. He was followed by Dr. Walsh, who laid special stress on his views relating to excretory irritation. Dr. Knowsley Sibley referred to the importance of internal treatment and of dietetics. Dr. Pernet was of opinion that as far as psoriasis was concerned little was to be obtained by diet in the way of improvement. Dr. P. S. Abraham, President of the Section, reminded it that the question of diet in dermatology was an old question, which was much to the fore forty years ago. Dr. Duncan Bulkley replied. The next item was a demonstration by Dr. Morton on the use of carbon dioxide. This was followed by demonstrations by Dr. Hall-Edwards, of Birmingham, and by Mr. Willmott Evans and Dr. Meachen on the same subject. Then Mr. Dawson read a paper on diphtheria of the skin, on which Dr. Pernet offered some remarks. In the afternoon Dr. Louis Wickham, of Paris, dealt with radium in a joint meeting with the Sections of Laryngology and Surgery.

Friday, July 29th, 1910.

This Section has been extraordinarily well attended, and the President, Dr. P. S. Abraham, and the Secretaries are to be congratulated on the result achieved. A number of interesting and unusual cases have been exhibited before the meeting each morning. The demonstrations attracted large audiences. Among the visitors may be mentioned Professor Unna of Hamburg, Dr. Duncan Bulkley of New York, Dr. Hartzell of Philadelphia, and Dr. Feibes of Aachen, and they either read papers or offered remarks on those of others. The last Sectional meeting was opened by a paper by Sir Jonathan Hutchinson on palaeogenesis as illustrated in certain affections of the skin, a number of drawings being exhibited. This was followed by Dr. Bunch on vaccine treatment in certain skin diseases. Dr. Dally then read a paper on favus in London and its treatment. Papers on pityriasis rubra pilaris, by Dr. Tomkinson (Glasgow); on an unusual toxic dermatitis, with remarks on symmetrical eruptions, and on a case of pemphigus vegetans, with remarks on treatment, by Dr. George Pernet; the treatment of *x*-ray burns, by Dr. A. Eddowes; lily rash of the Scilly Islands, by Dr. Walsh; on some points in electrolysis in hirsuties, by Mr. Evans; on some cases of actinomycosis, with special reference to treatment with iodide of potassium, by Dr. Wild (Manchester); and notes on a variety of molluscum contagiosum, by the President of the Section (Dr. P. S. Abraham). The success of the Section was marked, and the amount and quality of the work done has rarely been equalled at any previous Annual Meeting.

[In the short report of the first day's work of the Section of Dermatology, published in the JOURNAL of July 30th, page 284, Dr. Stopford Taylor was erroneously described as of Glasgow, instead of Liverpool. It was also said that Dr. Douglas Heath, of Birmingham, denied that inunction treatment was valuable in bad cases of syphilis, while it should have been stated that he strongly advocated the inunction treatment for the so-called malignant cases of the disease, as being much more rapid and certain than pill treatment, and as being free from many of the objectionable features of injection treatment.]

SECTION OF DISEASES OF CHILDREN.

Thursday, July 28th, 1910.

DR. C. R. BOX opened a discussion on the diagnosis and treatment of infections of the urinary tract by the *Bacillus coli*. Remarking that girls were more often affected than boys, he pointed out that the condition might be either acute or chronic, and might show a great variety of symptoms, generally appearing as a cystopyelitis. The acute forms were most often seen in infants; the chronic in older children, and these might end in uraemia. Diagnosis was often difficult, and must ultimately depend upon the results of careful examination of the urine; the main symptoms, if local, were often misleading, and if general might give rise to no suspicion of cystopyelitis. In treatment, Dr. Box recommended that potassium citrate should be given; the results of antiseptic treatment he described as most disappointing in the chronic cases. Mr. J. Pardoe dwelt on the comparative rarity of these infections in children as compared with adults. He described the symptoms and signs that may be met with, emphasizing the difference between those exhibited by children and those shown by adults. He regarded the prognosis in the chronic cases as bad, so far as cure was concerned; in the acute instances children showed far greater powers of recovery than adults. Complete rest in bed on a simple or milk diet, with decoction of *Triticum repens* and preparations of sandal-wood oil, were indicated in the acute cases; instrumentation of any sort was strongly contra-indicated. He had seen no cure of *coli* bacilluria by vaccine treatment. Dr. J. Porter Parkinson divided the patients into three classes, according to the severity or distribution of their symptoms, and spoke of the disappointing results of vaccine therapy. Dr. E. Cautley distinguished between the cases of *coli* bacilluria in otherwise healthy children presenting no symptoms at all, and those in whom local or general symptoms of greater or less severity occurred. Dr. J. Graham Forbes described the bacteriology of *coli* bacilluria, pointing out the predominance of *coli* over other microbic urinary infections, and also detailed the *post-mortem* appearances seen in fatal instances. No very great cultural uniformity characterized the strains of *B. coli* grown from the various cases of bacilluria. Mr. W. M. Jeffreys described a number of cases of *coli* and *proteus* bacilluria, again drawing attention to the intractable nature of the chronic cases. Dr. J. McCaw quoted an example of *coli* bacilluria in which potassium citrate given per rectum produced great improvement, and emphasized the importance of rest and milk diet in the treatment of the condition. Good results from the vaccine treatment were quoted by Dr. J. S. Dick. Dr. J. H. Thursfield described the condition as met with in the out-patient department, and characterized the prognosis as far less hopeless than the remarks of previous speakers would have led him to believe. The President drew attention to the uncertainty so often attaching to statistics appearing to indicate great disparity of incidence of disease in the two sexes. Dr. Box, in replying to a number of questions, noted the frequency with which *coli* bacilluria may be met with in patients with diphtheria or scarlet fever. Mr. Pardoe also replied. Dr. T. Zangger read a paper on the therapeutics of whooping-cough, recommending quinine, or preferably euquinine, in doses of 2 or 3 grains given three or four times a day, as the best drug. He also spoke highly of hydropathic treatment, the cool pack. Dr. Essex Wynter spoke of the admirable results obtained by the use of chloretone in whooping-cough. Professor A. D'Espine gave a summary of his paper on the diagnosis of tuberculosis of the bronchial glands; on auscultation at the level of the last cervical and first dorsal spine, vocal resonance, he said, was increased if the bronchial glands were enlarged, and the breath-sounds there (and in adjoining regions often) were increased. This glandular enlargement was not necessarily tuberculous, but might be a sequela of measles or whooping-cough. He added that he attached great value to von Pirquet's reaction, especially when it was negative. Mr. F. W. Goyder commented upon the paper. About sixty members were present at the meeting.

Friday, July 29th, 1910.

Dr. J. McCaw opened the proceedings with a paper on a case of acetonaemia. The patient was an otherwise healthy and properly fed girl of 3, subject to periodical attacks of severe vomiting. The respirations were usually much embarrassed during these attacks, which had been diagnosed indifferently as bronchitis, pneumonia, and indigestion. The breath, vomit, and urine all smelt strongly of acetone; much relief was obtained by the administration of sodium bicarbonate by the mouth. Dr. R. Hutchison commented on the interest of the marked respiratory symptoms in Dr. McCaw's case, and discussed the general pathology of acetonaemia. Dr. F. W. Langmead proposed to divide cases of acetonuria into three categories: in some no symptoms of acid intoxication might occur, in others cyclical vomiting might be a

prominent feature. He had met with numerous cases in which alkalis had been given freely without any improvement. Dr. Essex Wynter attributed delayed chloroform poisoning to suboxidation, and quoted a case in which thyroid extract had done good. The President threw grave doubts on the whole theory of acidosis as held at present. He agreed with Dr. Hutchison in holding that cyclical vomiting might be the result of many causes. Dr. E. Pritchard discussed the relation of carbohydrate starvation to acetonuria. Dr. McCaw made a brief reply. Mr. J. Keogh Murphy next read a paper on the results of radical treatment of tubercle in the tarsus and ankle-joint in young children. He dwelt on the many misconceptions with which the subject was involved in books, and described the general surgical measures he had employed. The paper was illustrated by skiagrams and lantern slides. The results were satisfactory in all the cases, and left nothing to be desired in 7 out of 9. Mr. D'Arcy Power discussed the propriety of amputation in these cases. Mr. F. W. Goyder complimented Mr. Murphy on the admirable results he obtained. In replying, Mr. Murphy gave some details of his operative technique. Dr. Olive Elgood then read her paper on human milk and breast feeding. The methods of collecting the milk and of analysing it were described. It was shown that while the percentage of fat might vary widely from month to month in any given case, the percentage of solids not fat remained remarkably constant. From the point of view of the nutrition of the infant, the fat appeared to be the most important constituent of the milk. The President and Dr. F. W. Langmead asked questions arising out of the paper, and to these Dr. Elgood replied. Mr. H. Tyrrell Gray next read a paper on lesions of solitary appendices in hernial sacs. The application of taxis in these instances he particularly deprecated; the literature appeared to contain 58 such cases, and an analytical table of these was handed round. The differential diagnosis of the condition was very fully detailed. Mr. R. Campbell quoted cases in which appendicular trouble arose in hernial sacs from injudicious use of trusses. Mr. R. B. Wade gave an account of a case seen in a child only 2 years old. Mr. Gray made a few remarks in conclusion. Dr. Eric Pritchard read his paper on the value of banana flour in infant feeding. He mentioned the importance of accustoming the artificially-fed infant to cow's milk; the particular advantage of banana flour lay in the fact that it formed a good emulsion in a few minutes' time. An ounce of the crude flour (which he preferred to the more refined or patent bleached forms) boiled for only five minutes with a pint of water gave a decoction thoroughly suitable for mixing with an equal volume of cow's milk. He advised the substitution of the crude banana flour for the expensive proprietary foods so often recommended in the artificial feeding of infants. Dr. McCaw, the President, and Dr. J. H. Thursfield asked questions as to the practical application of banana flour in feeding infants. Dr. Pritchard replied that it might be used tentatively in infants only a few weeks old; he had never known intestinal sand passed by children taking banana flour. The session of the Section was attended by about seventy members, and was closed by the President in a few felicitous words.

Section of Gynaecology and Obstetrics.

Thursday, July 28th, 1910.

A discussion on the treatment of fibromata complicating pregnancy—a subject of equal interest to gynaecologists and medical practitioners—was opened by Dr. Walter Tate, who gave as essential points to be considered: (1) The unfavourable changes that may occur in fibroids during pregnancy; (2) the frequency of miscarriage, and any special dangers from this accident; (3) the increased risk of labour, whether due to *post-partum* haemorrhage, septic infection, suppuration, or sloughing of the fibroid. In regard to enlargement, which was the first change to be considered, the speaker held that, if the fibroid was moderate in size before pregnancy, it would probably not cause any serious trouble from its size alone. Conception, however, might occur in a uterus with a tumour so large that serious symptoms might arise from pressure on the diaphragm in the latter half of pregnancy. Necrobiosis might cause serious persistent pain and necessitate interference. When the tumour was situated partly or entirely in the true pelvis serious pressure symptoms might undoubtedly arise. Albuminuria, however, was more likely to be due to the ordinary toxaemia of pregnancy than to pressure on the renal veins. Torsion of the pedicle of a fibroid during pregnancy had been met with, but so rarely as not to be regarded as a practical danger. The frequency of miscarriages was little, if at all, greater in pregnant women with fibroids than in others. A fibroid might cause extreme difficulty in removing retained portions of placenta, and sapraemia might supervene; in this exceptionally rare complication, if the retained products could not be removed, the removal of the uterus, if not too long delayed, would cure the patient. A fibroid situated in the pelvis is bound to obstruct labour and perhaps lead to rupture of the uterus if suitable treatment be not adopted. Such dangers were more probable when the presence of the tumour was not known to the patient or her medical attendant, and indicated the propriety of systematic examination of pregnant women. The risk of *post-partum* haemorrhage is serious, and special care should be exercised in managing the third stage of labour. During the puerperium a fibroid might be extruded and present in the vagina: it would then slough and sapraemic symptoms follow. Puerperal necrobiosis of a fibroid might cause pain and tenderness over the tumour and pyrexia. True suppuration of a fibroid was rare, and, as it was invariably due to imperfect asepsis, was avoidable. The treatment of fibroids during pregnancy depended upon their situation, upon whether they would certainly, possibly, or certainly not, obstruct delivery. In the first case, if mobile, they might be pushed up above the pelvic brim; if too firmly impacted for this to be done without undue force, abdominal section and enucleation were safer; if there were no pressure symptoms it was better to wait till near term, and perform Caesarean section and enucleation, or panhysterectomy. Small cervical fibroids and polypi might be removed per vaginam near the expected term. In the second group were included cases in which the fibroids were multiple and one or more of them encroached on the lower uterine segment. In such the speaker held an expectant attitude to be best for mother and child. In the third class, the fibroids were entirely abdominal, and in the absence of severe symptoms operative interference he regarded as unwarrantable. Serious symptoms might compel interference, abdominal enucleation, or hysterectomy; enucleation was the operation of choice. The induction of abortion sacrificed the pregnancy and did not relieve the patient of her tumour; it was an improper proceeding. This admirable introduction by Dr. Tate led to an animated discussion, in which Dr. Amand Routh, Dr. Cuthbert Lockyer, Mr. Alban Doran, Dr. Christopher Martin, Dr. J. Nigel Stark, Dr. Hubert Roberts, Professor Murdoch Cameron, and Dr. Furneaux Jordan took part. There was general agreement against too hasty interference, and that enucleation was the operation of choice, and generally with the introduction as a whole. Dr. Herbert Spencer insisted especially on the rarity with which operation was necessary; he mentioned puerperal inversion of the uterus as sometimes caused by fibroid. Dr. A. J. Wallace exhibited an enormous fibroid enucleated from the uterus of a woman of 45 at the fifth month; the wound in the uterus was 4 in. by 5 in., and exposed placental tissue, but the woman recovered and had a live child at term. Dr. Arnold Lea and Dr. Lloyd Roberts thought the dangers of the complication were underrated, and Dr. Arthur Giles contrasted the risk of patients in ordinary private, perhaps country, practice with that of those under the care of skilled operators and obstetricians. Of the former, he thought one-half

suffered from serious complications. Professor Gottschalk, of Berlin, read a paper on two cases of obstructed bowels by the retroverted uterus; Dr. Frances Ivens (Liverpool) one on localized necrosis in an adenomatous right tube associated with left tubal mole; and the day's proceedings terminated with a paper on the causal treatment of dystocia in cases of pelvic contraction, by Professor von Herff, of Basle; in the enforced absence of the author this paper was read by Dr. Hedley, Honorary Secretary.

Friday, July 29th, 1910.

Professor W. Nagel, of Berlin, in a paper entitled "Is it justifiable, when removing a proliferating papillary ovarian cyst, to leave the other ovary if it appears unchanged?" quoted various statistics, reported two cases of his own, and concluded that in papillary cystoma the extirpation of the other healthy ovary is not, as laid down by Pfannenstiel and others, necessary. Even in carcinoma, after the removal of the primary tumour, the same affection of the remaining ovary is not frequent, and as Hofmeier has said, the danger of a possible second operation is in a young woman outweighed by the advantage of preserving the other ovary. This paper was very fully discussed by Professor Gottschalk, Professor Kynoch, Dr. Munro Kerr, Dr. Herbert Spencer, Dr. Walter Tate, Dr. Blair Bell, Dr. Louise McIlroy, Dr. Felix Meyer (Melbourne), Dr. Heywood Smith, and the President, Mrs. Scharlieb. The general feeling seemed to be that no healthy ovary should be removed, that ovarian papillomata were very common, that they were of most various degrees of malignity, but that really malignant growths were generally bilateral, that when suspicion demanded the removal of the second ovary, especially in women approaching the menopause, the uterus should be removed also. It was also pointed out that to make sections and a microscopical examination at the time of operation was perfectly feasible. Professor Nagel admitted that nearly 50 per cent. of papillomatous ovarian tumours were carcinomatous, and concurred as to the removal of the uterus. In her paper on the surgical treatment of fibrosis of the uterus, Dr. A. Louise McIlroy said that the term "fibrosis" applied to the uterus denoted an increase in the fibrous stroma of the organ, which might be associated with hypertrophy of the muscular tissue and thickening of the outer coats of the vessels. Clinically it was the cause of haemorrhage and dysmenorrhoea, pelvic pain, and general discomfort. As it was mostly found in women in the child-bearing age, and was unrelieved or but temporarily relieved by drugs or curetting, and as ventrisuspension when there was retroversion did not permanently cure, surgical measures had often to be adopted. She related four cases: in two in young women ventrisuspension and curetting gave some relief, but only for a time; in the third case removal of both sets of appendages gave relief from the haemorrhage, but not from the pelvic pain; in the fourth a complete cure was obtained by hysterectomy. A lively discussion followed, and there was a general agreement that hysterectomy was—especially in women who had to support themselves—sometimes absolutely necessary, but, as Dr. McIlroy herself admitted, only as a last resource. Dr. Comyns Berkeley suggested that Kelly's wedge-shaped excision might sometimes be substituted for hysterectomy; Dr. Herbert Spencer concurred, and also suggested Dührssen's excision of a portion of the uterine mucosa, moreover he confirmed the statements of Dr. Hastings Tweedy as to the beneficial effect of atmocausis. Dr. Blair Bell said that the uterus, except when it had been infected (gonorrhoea), was never the seat of fibrosis in women who had not borne children. Its causes were infection, subinvolution, or climacteric change. He had connected some cases provisionally with hyperthyroidism. Dr. Curtis Webb spoke strongly in favour of electrical treatment, and received support from others. Dr. Walter Tate, Dr. Purslow, Professor Kynoch, Dr. Kirkby Gomes, and the President (Mrs. Scharlieb) also spoke. Professor Gottschalk recommended sterilized injections of glycerine to control haemorrhage. Dr. Döderlein exhibited some drawings illustrating his methods of performing subcutaneous hebosteotomy and extraperitoneal Caesarean section. Exception was taken by Dr. Tweedy and Dr. Munro Kerr to this method being called subcutaneous (the finger being inserted between the bone and the bladder through a small incision above the os pubis). Dr. Tweedy eulogized Bumm's really subcutaneous method, which he said might be practised by any well-trained practitioner—a statement from which Dr. Kerr differed decidedly. As regarded the extraperitoneal Caesarean section, the only advantage Dr. Kerr saw in it was less liability to rupture of the uterus in a subsequent labour; while Dr. Spencer, who had often delivered a child by the classical operation in little if anything over a minute, thought that the delivery of the child by this method would be much delayed; Professor Döderlein said that the child was delivered in about five minutes from the first incision. Dr. A. J. Wallace then read a paper on intraperitoneal haemorrhage in cases of fibroma uteri; Dr. C. Nepean Longridge one on the involution of the puerperal uterus; and Professor Gottschalk gave a lantern demonstration of the microscopic appearances of erosions of the cervix, prior and subsequent to malignant change. It was pointed out to Professor Gottschalk that the term "erosion" does not to the British gynaecologist imply any adenomatous growth as it seems to do in Germany. With enthusiastic votes of thanks to the President (Mrs. M. A. D. Scharlieb), for her conduct of the meeting, and to our German colleagues for their presence and co-operation in the proceedings the meeting terminated.

Section of Laryngology.

Thursday, July 28th, 1910.

The proceedings of this Section commenced at 10 a.m. with a short explanatory address by the President as to the order and limitation of the subjects. Dr. Birkett of Montreal then read his paper on vasomotor rhinitis, and referred to the limitation of our knowledge of the etiology of the condition. For example, the factors of inheritance, external irritation, and neurotic temperament all remained to be worked out. It was certain that there were special exciting causes in some individuals, and he discussed pollen, actinic rays, and in this connexion dealt with the various theories of different authorities. He summed up the causes under three headings—a neurotic temperament, a local morbid condition of the nasal mucous membrane, and some irritant. He referred to the presence of sympathetic nerve filaments in cerebro spinal nerves, and which were frequent in the fifth, irritation of which was a possible cause of the trouble. He thought that the symptoms might be divided into three main groups. With reference to treatment, one would have to consider both local and general conditions. Mr. Waggett, continuing the discussion, read a suggestive paper as to lines of future investigation of the subject. He reviewed the facts that certain individuals were attacked by the symptoms of spasm, while others were unaffected. He discussed this peculiar idiosyncrasy, and thought that the constitution of the blood was a very important factor that required investigation. In this relationship he dealt with the features of urticaria in its relationship to a deficiency of calcium salts in the blood, and laid great stress upon the importance of a thorough investigation into the chemistry of the blood. This should clarify a very vexed problem. Dr. A. Francis gave some interesting details of the effect of light touching of the nasal cautery upon varying portions of the nasal mucous membrane. The results he had obtained in children showed that the effects could not be due to suggestion in such cases at least. The more normal the nose the better his results. He then showed the varying effects upon blood pressure caused by the application of the cautery to various portions of the mucous membrane, some causing a rise and other points causing a fall of pressure, which latter

effect was more easily produced. The discussion was continued by Mr. Stuart Lowe, who objected to the title of the discussion, which was unsatisfactory and conveyed no knowledge of its pathology. He thought that there was too little mucous secretion in such cases, which left the membrane more exposed to external irritants. Dr. StClair Thomson suggested the use of the term "spasmodic rhinorrhoea" as a better title. Dr. Watson Williams thought a large proportion of the cases were due to biochemical changes in the blood affecting the bulbar centres, and that the main treatment was general. Dr. Luc thought that many cases were due to a degeneration of the mucous membrane under the middle turbinate, and that attention should be directed to this condition. The discussion was fairly general, various opinions being expressed. Dr. Haring considered that the catarrh present was not an essential part of the trouble. He classed the trouble with migraine, epilepsy, and other nerve lesions. He divided treatment into two classes—those with nasal lesions, which should be appropriately attended to, and those without, when suggestion was useful, which he considered to be the action of the cautery. Drs. Birkett, Waggett, and Francis replied after the President had summed up. Dr. W. Camac Wilkinson then read his paper on tuberculin in the treatment of laryngeal tuberculosis, based on his Australian experiences. He instanced several cases showing the results of his treatment. The paper was discussed by Dr. Watson Williams, who welcomed any method which would give better results than those they now obtained. He considered it essential to begin well by small doses of tuberculin. Dr. Waggett had found most benefit in chronic cases, when a balance had been established between the bacillus and the patient. Dr. Donelan had given up the tuberculin treatment for some years, preferring the silence method and galvanic cautery when suitable. Drs. Permewan and Birkett joined in the discussion, and Dr. Wilkinson briefly replied.

Friday, July 29th, 1910.

Dr. Seccombe Hett, in a paper on the anatomy of the capsule of the tonsil and its significance in the treatment of diseases of the tonsil, reviewed the comparative anatomy of the organ, illustrating his remarks with some excellent specimens, together with a few microscopic sections, which showed the supratonsillar fossa. He discussed the characters and indications for removal of different varieties of tonsil in cases of inflammation and new growth, and the relationship of these conditions to the capsule of the gland. Dr. Dan McKenzie then read his paper on enucleation of the tonsil. He discussed the *pros* and *cons* of enucleation *versus* a tonsillotomy, and considered that in tubercle the former should be the procedure, even though the organ was smaller than normal. The same treatment he accorded to the hidden tonsil. He described enucleation of the tonsil, showed the instruments he used, and referred to some difficulties in its removal, discussing also some of its dangers. Dr. StClair Thomson demonstrated several tonsils removed in their capsule by the guillotine, illustrating his remarks by diagrams, and showing the instruments he used, the calibre of the ring being very much smaller than the tonsil it removed, and finished his remarks by stating that both methods of guillotine and dissection were useful. The subject was then generally discussed by Dr. J. S. Bryan, who advocated the use of hydrogen peroxide for haemorrhage, but pointed out the danger of asphyxia resulting from the foam produced. Dr. Luc supported the cold-snare method of removal of tonsils, and mentioned the Vacher's rigid form of instrument made by Collins of Paris. Dr. Donelan chiefly used Mackenzie's form of guillotine as modified by himself. Dr. Watson Williams asked if it were advisable to completely remove the tonsil, and thought it an open question until the functions of the tonsil were more definitely known. Dr. Syme was not convinced that enucleation should be the routine method, and thought that the deep anaesthesia required was an added risk in children. Dr. Lack preferred the guillotine, excepting in cases of diseased tonsils. Dr. Stuart Lowe advocated enucleation in adults in certain forms of hypertrophy, but the guillotine for children. The President summed up in a few words, and the readers of the papers replied. Dr. Hemington-Pegler read a paper on headaches in association with obstruction in the nasal passages. It was illustrated by diagrams with a scheme of referred head pain and reflex action. He instanced cases which bore upon his thesis where intranasal treatment had improved and cured the headaches. He objected to the term "tubercle of the septum," preferring that of "cushion." Dr. Scanes Spicer then read a paper on cancer of the throat, with special reference to its site in relation to the bony, cartilaginous, and ligamentous framework of the endo-skeleton. He instanced that cancers were never found amongst the invertebrates, and argued that they only occurred where hard tissues, as bone or cartilage, came into contact with soft parts. Dr. Watson Williams demonstrated his special method of operation upon the frontal sinus for suppurative conditions in this neighbourhood, showing a living case in support of his thesis. Mr. Butlin, the President of the College of Surgeons, was present during part of the proceedings, and was thanked by the President of the Section for the personal interest he had taken in the work of the Section.

SECTION OF MEDICAL SOCIOLOGY.

Thursday, July 28th, 1910.

THE discussion on the provision of medical attendance by means of a State sickness insurance and the relation of this insurance to the public health and to the medical profession occupied the attention of the Section on Thursday morning. Mr. Smith Whitaker opened the debate by a communication in which he criticized the present conditions underlying private medical practice, contract practice, and the charitable services, regarded from the point of view of the economic maintenance of the public health. He then explained the advantages of a public medical service, laying emphasis on the necessity of preserving the provident element in such a service. The co-operation of the medical profession must be voluntary, and the profession must be regarded as the natural adviser of the Government, and as one of the contracting parties the profession should have a right to bargain as far as terms were concerned. The bargain, he contended, must be as between the profession as a whole and the community as a whole. Dr. J. Pearse attacked the Minority Report of the Poor Law Commission, and especially criticized some misstatements on which the recommendations contained in it were based. In speaking of the introduction of a State insurance scheme, he called attention to what is known in Germany as "*Rentensucht*," or desire on the part of the insured to live on their insurance money without proper cause. Mr. C. S. Loch, of the Charity Organization Society, read a paper in which he set forth the reasons why he disapproved of the present methods of contract practice and advocated a scheme of a new classification associated with either the dispensary system or that of State insurance. He appeared to be opposed to a very sudden radical introduction of the German system of insurance. Dr. Keay made an attack on the London Hospital methods, and then dealt in general terms with the German State insurance. He adduced evidence to prove that the effect of the introduction of Bismarck's reform had been highly beneficial to the economic conditions of the people, and dealt with the question of the free choice of doctor in the service under an insurance scheme. Mr. H. W. Armit contended that any system of compulsory sickness insurance, to be adequate, must be based on a full record of the population—in other words, a police registration must precede the introduction. He attempted to show that the hardships associated with registration were imaginary and not real. The conditions in Germany proved conclusively that compulsory sickness insurance, associated with police registration, had improved the conditions of the masses materially, and had at the same time effected a change for the better in the

medical profession. With regard to *Rentensucht*, he believed that this was exaggerated. He spoke of the forms of true neuroses which occurred after accident, and which had to be differentiated from malingering by a special system. Dr. Major Greenwood thought that it was necessary for a public medical service to be instituted before the Government presented its insurance bill. He regarded the abolition of destitution as visionary. Dr. Holder advocated the adoption of a scheme on the lines of the National Deposit Friendly Society's scheme, and Dr. Bygott defended the position of the medical officer of health. He regarded the scheme of State insurance on German lines as advisable in many points, but did not think that the British people would stand it. Dr. Muir spoke of the independence of the population to the north of the Tweed. Another speaker dealt with the problem from the point of view of the friendly societies, and Dr. Williams and Dr. Henry also took part in the debate.

Friday, July 29th, 1910.

A discussion took place on the decrease of the birth-rate. Dr. Ballantyne read a masterly paper in which he argued that the falling of the birth-rate was due to the dissemination of the knowledge of the possibility of limiting the number of pregnancies, the late age at which marriage was contracted, and possibly the increased participation of women in intellectual pursuits, athletics, and factory labour. He also spoke of the high antenatal death-rate as a factor in the reduction of the number of population. He regarded this wastage as a menace to the nation, and sketched the manner in which the restoration of a normal birth-rate might be effected. He was hopeful, but realized that the tide was still flowing in the other direction. Dr. Fremantle attacked the problem from a statistical point of view, and deduced from his figures that the decline of the birth-rate was due to the knowledge of methods of prevention, to economic factors chiefly arising from immoderate competition, to a lack of discipline, and an increase in indulgence. Dr. Hunter contended that the elder born children of a family were more liable to suffer from defective conditions than the younger ones, and that the seventh child was best placed. A marked rise in "defect" occurred with the eighth born. The same applied to children of elder born and late born parents. Artificial sterility begat natural sterility, and natural sterility begat idiocy. Dr. Buist regarded the question from a biological and an economic point of view, and in substance found that the evidence of disadvantage from the falling in the birth-rate was not convincing. Biologically the characteristics of those classes in which the fall was most marked were such as suggested a possible gain from the fall, while economically the increased industrial employment of women led to underselling, and in this direction the falling birth-rate might be regarded as a strike of parents for better social conditions. Dr. Dulberg advocated measures which would diminish infantile and juvenile mortality. The most valuable measure was insistence of breast feeding. Wet nursing should be followed as a profession by a greater number of women who now turned to the factory. Professor Benjamin Moore doubted whether it was physiologically sound to advise parents to reproduce as rapidly as possible. Regarding the matter from the point of view of the woman, he considered it necessary to provide a rest between pregnancies. Gestation and lactation called for recuperation, and he believed that there should be three years' interval between the children, and that a working man's family would be better if not more than four children were born. From the figures he did not recognize any immediate danger. Dr. Grace Cadell agreed with Dr. Buist and Professor Moore, and spoke strongly of the necessity of preventing marriage when one of the contracting parties was suffering from gonorrhoea, the chief cause of sterility. She did not think that it was wise that a woman should bear a child every year, and advocated a prolonged period of celibacy after the birth of the child, as prescribed by the Jewish law. Dr. Gilchrist, in a valuable paper, dealt with the social aspect of the problem from the standpoint of eugenics. Dr. Howatt doubted the advisability of breeding from a rapidly diminishing stock. Dr. Frances Ivens also dealt with the importance of gonorrhoea as a widespread cause of sterility, and Dr. Muir spoke of the economic conditions of the lower classes in Glasgow. Dr. Helen Hanson believed that the integrity of the family was on the increase while the birth-rate was falling. She held that it was the husbands and not the wives who wished for a limitation of the number of children. Dr. Bentham showed that the mother was the one in the family who had to go short, and that while this condition existed it would be undesirable to require her to bear a large number of children. Mr. Somerton Clark supported the idea of employing measures to check the fall in the birth-rate in the "upper classes." Dr. Dunlop regarded the decline in the birth-rate as most satisfactory in so far as it revealed a growth of the feeling of parental responsibility. Dr. Reynolds believed that the Church could and should contribute to the matter. Dr. Ballantyne replied.

SECTION OF MEDICINE.

Thursday, July 28th, 1910.

A DISCUSSION on the treatment of chronic constipation was opened by Dr. J. F. Goodhart, on the lines already printed in the SUPPLEMENT of the JOURNAL. Constipation was defined to be an unnatural delay in the passage of the intestinal contents along the colon. From bismuth observations the average period for the passage of the intestinal contents along the colon only would appear to be some twenty hours from taking the meal; and three or four hours more before expulsion. Constipation thus fell into two groups: constipation of the colon, and constipation of the collecting chamber or rectum. Evacuation of the one was an automatic reflex outside the control of the will; the other was largely aided by voluntary effort, and the trouble came into being when voluntary muscular effort failed. Constipation of the main tract of the colon was a much more intricate subject; it was in the main a physiological one. Its causes concerned themselves with the neuro-muscular apparatus of the intestinal wall and the intestinal contents. The nervous element in the circuit was a dominant one; in constipation habit, nervous vigour and its oscillations, the temperament of the subject, the mental condition and muscular power were important. The attributes of peristalsis were discussed as regards the intestinal contents. The quantity, quality, and variety of food were important; the colon was meant to be full, not empty. Intestinal tone was one of the chief conditions. As to the treatment, not every case needed it. Constipation was healthy for many. The doctrine of intestinal auto-intoxication, as developed of late years was extreme and physiologically unsound. He deprecated the use of intestinal antiseptic and surgical operations, and counselled common sense, the need of patience and perseverance, leaving the bowels to work out their own salvation. Professor Baümler (Freiburg) thought it important that the tone of the sympathetic nervous system should be maintained, and to this end a sufficiency of sleep should be obtained. Sir James Sawyer argued that drugs should not be employed except as a last resort, and advocated uprightness of carriage as a preventive. Dr. H. D. Rolleston thought that the effect of auto-intoxication in constipation should not be minimized. He alluded to the causes of low muscular tone, and of excess of tone in the different forms of constipation. Dr. Newton Pitt pointed out that the dejecta were in only slight degree food residue, but epithelium, mucus, and largely bacteria. He thought autointoxication of great importance, but that its effects varied in different individuals. Mr. Arbuthnot Lane insisted on the extreme seriousness of the results of intestinal autointoxication, and advocated surgical operation in severe cases where other measures had failed. Dr. A. Mantle referred to mucous colitis and enterospasm

in constipation and the irrigation method of treating them. Dr. A. F. Hertz described his observations on bismuth meals. Dr. W. Ewart thought the education of the function of strain was important in relation to constipation. Dr. G. Herschell alluded to the use of warm olive oil injections and the value of the sigmoidoscope. Dr. Stuart Tidey thought the more gregarious a people the more prevalent was constipation, and advocated lavage and surgery in severe cases. Dr. Eason discussed the treatment of constipation with hormones. Dr. John Haddon made some remarks on the physiology of defaecation, and Dr. Goodhart replied. Dr. W. Ewart then gave a demonstration on the value of percussion of the vertebrae in diagnosis.

Friday, July 29th, 1910.

The third day of the meeting of the Section was devoted to the reading and discussion of original papers; the first, on the treatment of neuralgia and sciatica by the injection of 90 per cent. alcohol and eucaine β in normal saline solution respectively into and around the nerve, was read by Dr. Wilfred Harris, and was discussed by Dr. A. O'Sullivan. Dr. Laurence Humphrey read notes of a case of aneurysm of the aorta communicating with the superior vena cava, which was discussed by Dr. H. Morley Fletcher. Dr. Humphry, with Dr. W. E. Dixon, communicated a paper on a case of acromegaly with hypertrophy of the heart and other organs in which apparently new pressor substances in large amounts were found in the urine; this was discussed by Professor Edsall. Dr. G. Guelpa (Paris) read a paper on prophylaxis and treatment of diseases, including diabetes, by starvation, which was discussed by the President (Dr. R. W. Philip). Dr. Ettie Sayer read a paper on the effects of electrical currents on blood pressure, which was discussed by Dr. S. Sloan and Dr. J. Haddon. Dr. A. C. Jordan gave a lantern demonstration of *x*-ray appearances of thoracic aneurysm, and Dr. Herbert French discussed the possible fallacies of the method. Dr. Souttar showed an improved and simplified gastroscope and a working model on which its passage could be practised. Dr. J. S. Mackintosh read a paper on the evolution of the racial types of Europe and its bearing on the racial factor in disease. Dr. W. Camac Wilkinson read a paper on the treatment of pulmonary phthisis with tuberculin, which was discussed by Professor Sahli (Berne), Dr. G. A. Heron, Dr. Odell, Dr. French, Dr. Garson, Dr. Hamilton, Dr. J. F. H. Dally, and the President.

NAVY, ARMY, AND AMBULANCE SECTION.

Thursday, July 28th, 1910.

FLEET SURGEON W. W. PRYN, in a paper on tests for colour vision, said that it was essential that the examiner should himself have normal colour vision, and be tested on this point by the spectroscope. Some very hard things had been said of Holmgren's test; it had been maintained that it allowed some candidates to be passed who ought to be rejected and others rejected who ought to be passed. At the Admiralty Holmgren's test had been found very useful when used as a check on the lamp test. A candidate who had failed with the lamp test almost invariably broke down with the wool test when the test was carried out strictly in accordance with Holmgren's directions. When applied to the subject of incomplete colour blindness, the test, as compared with the lamp, was certainly not so convincing to an onlooker. In pronounced cases of colour blindness the examinee frequently broke down at once and selected several confusion colours before any of the correct skeins. It had often been said that colour-blind persons might pass Holmgren's test, but that was not the experience of Fleet Surgeon Pryn. On the morning of Easter Monday 102 Dulwich College boys were examined with the Edridge-Green lantern and 4 of them were found to be colour-blind. One of the masters, who knew that he had difficulty with colours, requested to be examined with the lamp, and he failed badly; in the afternoon of the same day these 5 were examined by means of Holmgren's test, and all failed. Fleet Surgeon Pryn was told by a visitor to the college of his being "somewhat colour-blind," his difficulty consisting in seeing red unless it were bright and at a comparatively short distance. With the lamp, colours were misnamed. According to reports recently obtained by the Board of Trade, Greece and Italy alone had no colour-vision test for their mercantile services, while the Holmgren wool test, either alone or as an alternative or supplement to other tests, was used in the United Kingdom, Austria, France, Germany, the Netherlands, Norway, Russia, Sweden, and the United States. Japan also employed a wool test, though not apparently one based on Holmgren's principles. Colour vision, as required for sea service, was best tested by the Edridge-Green lamp, and the practice of requiring the coloured lights to be matched with wools was to be recommended. A paper communicated by Fleet Surgeon G. T. Collingwood on naval recruits was read, and, following on the discussion thereon, Surgeon-General Evatt gave details of a proposal to form a united service medical corps. The Section then adjourned.

Friday, July 29th, 1910.

At the concluding sitting the first paper read was by Major S. L. Cummins, R.A.M.C., on the isolation of disease carriers and the methods of dealing with them. On the outbreak of an epidemic of typhoid, soldiers should be paraded in their barrack rooms, and, as each was reached by the medical officer, the soldier should loosen his clothes so as to display the thorax and abdomen, lie down on his bed, and undergo a rapid but thorough examination, directed to the discovery of slight splenic enlargement, rose spots, gastric, hepatic, or intestinal symptoms, signs of bronchitis or pleurisy, furred tongue, and redness or ulceration of tonsils or pharynx. Inquiries should be made as to general fitness, diarrhoea, constipation, sore throat, headache, and so forth, and the temperature should be recorded. Having carried out the inspection—which, by the way, must be repeated as frequently as the strength of the staff permitted—and thus isolated some suspicious cases, they must call upon the bacteriologists to elucidate these, and their assistance must be also required to deal with all contacts in the immediate vicinity of cases. Their efforts should be directed to proving or excluding typhoid infection in suspects and to the recognition of early cases or precocious carriers amongst the contacts. For the first the "Widal" reaction should be of the greatest use, and the examination of the excreta should also help. But as they were examining early cases they might expect great assistance from blood culture, especially in the very cases where "Widal" was still negative. That process, first perfected by Conradi, had now been so far simplified as to be an excellent and easily applied test for early typhoid infection. By means of those several procedures, medical inspection, "Widal," culture from the stools and culture from the blood, they should finally succeed in eliminating infective foci from their regiment, and bring the epidemic to an end. But they had left on their hands the original chronic carriers, as well as several temporary ones. What were they going to do with them? That they were capable of originating outbreaks had been proved in many recorded instances, and needed no further demonstration. The extent to which they were dangerous, however, gave more room for discussion. That danger was, apparently, greater from the temporary than from the chronic carrier. Under European conditions the chronic carrier was not a very great direct menace to the health of his neighbours. But all regular soldiers were liable to serve abroad, and a moment's consideration would show that the potential danger of a "carrier" was multiplied a thousandfold under military conditions in warm climates. The disposal of excreta was often imperfect, flies abounded, and the soldier was under new and unfamiliar conditions of life. Diet, climate, perhaps the exertion of active service, all tended to lower his health and diminish his resistance, while at the same time the paths of

dissemination of typhoid bacilli from the ever-present carrier were greatly increased in number. Major Cummins repeated that the danger from carriers, small under European conditions and in peace time, was urgent in the tropics and under war conditions. Klinger mentioned that "chronic carriers who had been told to take precautions caused 78 infections." They must get rid of them. They were a source of little danger to the civil population, but, in the army, under conditions of active service or tropical climate, they were likely to be very dangerous indeed. Their only course was what was now being done in the army—keep the men under observation for some months. If the excretion of bacilli was persistent, discharge them from the service, notifying their respective medical officers of health as to their condition. But with all precautions they must realize that they would always have typhoid carriers in the army, and that fact must be taken into account. Dr. John Brown (Bacup) and Fleet Surgeon Bassett-Smith having discussed the paper, Major Cummins replied. A paper communicated by Surgeon L. F. Cope, R.N., on air and ventilation in modern warships, was then read, and the statement was made in regard to battleships that, remembering that the cubic space per man in most of the living spaces on board was about 200 cubic feet, it might be rightly considered that the system of ventilation at present in vogue was very fairly successful, particularly as regards the artificial ventilation. Mr. W. H. Whiting, Assistant Director of Naval Construction, spoke of the hearty sympathy that existed between naval constructors and medical officers afloat to improve the conditions of life at sea, and Fleet Surgeon Robley H. Browne bore testimony to the enormous improvement in the sanitary conditions of modern battleships. After Fleet Surgeon Bassett-Smith had pointed out the importance of examining the bacteriological contents of the air in ships, the meeting concluded.

SECTION OF ODONTOLOGY.

Thursday, July 28th, 1910.

THE discussion on the prevention of dental caries was continued, the point specially under consideration this day being the effect of variations in the buccal secretions, and the part played by bacteria normally present. Mr. Kenneth W. Goadby, in introducing, said that from whatever point of view dental caries was regarded, there was now unanimity of opinion, based on ascertained fact, that the actual destruction of teeth by dental caries was due to the action of bacteria, and particularly to those bacteria fermentative of carbohydrates. Having described the sequence by which infection of the pulp took place, he said that until the occurrence of such infection practically no inflammatory action could be observed. In respect of bacteriological problems he drew attention to: (1) The enormous number of morphological forms present in the mouth in diseased conditions, particularly in caries or any disease of the gums. (2) The small proportion of mouth bacteria which may be grown on the usual culture media, the morphological forms found in the usual process of cultivation differing very largely from those found from smears made from carious dentine direct. Prophylaxis might, he pointed out, be attempted in two ways: (1) By removal of fermentable substances through the usual methods of hygiene and the adoption of a suitable diet. (2) By changing the flora of the mouth itself. This latter treatment he described very fully. After discussion of the paper by Messrs. F. J. Bennett, Sidney Spokes, Sim Wallace, and Howard Mummery, Mr. J. H. Badcock, in a paper on the need for the correction of malposition of teeth, showed a series of lantern slides illustrating the normal positions of the teeth, making special reference to the contact points of the teeth. He also showed slides illustrating irregularities of the teeth and consequent difficulties in adequately cleansing the mouth. In treatment he advocated that early attempt be made to correct the irregularities, expansion being effected when possible, and in default extraction of a sufficient number of teeth to relieve the crowding. The correction of the effects of drugs taken as medicine was next considered by Dr. Austen, who, after dealing with mercurials, teething powders—lead, copper, and others—came to the conclusion that there was little ground for the generally accepted statement that drugs are injurious to teeth. The President, Mr. J. Howard Mummery, dealt with the reasons for susceptibility and natural immunity. He considered that there were more predisposing or determining causes of dental decay at work than many of those present in the discussion seem disposed to admit. The final determining cause was the composition of the teeth affected.

Friday, July 29th, 1910.

In a paper on the value of teeth to the human economy, Mr. J. G. Turner said no one could deny that complete regular arches were indispensable to full beauty, and on this account he set a great value on the retention of the temporary teeth till their due date of shedding. Early loss meant contraction of the dental arch and subsequent exclusion of a permanent tooth. On the other hand, it was worth inquiring whether, from the point of view of mastication, views as to the necessity of teeth had not lost some of their former ground. Beside tooth mastication there was also tongue and gum mastication, and our cereal foods were finely ground and readily dealt with by tongue and gum mastication. Salivary and gastric reflexes were as readily and efficiently promoted by gum and tongue mastication as by tooth mastication. Mr. Turner referred to results from his experience in hospital work from extracting septic teeth and leaving people with clean mouths, even if edentulous. He also showed many interesting models of mouths very deficient by nature in masticating power and surface, and yet all quite healthy; and Mr. Turner contended that the difficulty in supplying artificial teeth to every hospital patient who appeared to need it would vanish when both physician and patient realized that sepsis was the enemy, not loss or absence of teeth, and that it needed but a little care to fare just as well in an edentulous state as with a full set of teeth. In a paper on the hygienic effect of crowns and banded teeth, Mr. H. Baldwin contended that the total condemnation of the use of caps or collars fitted to the roots of teeth and entering into the construction of some crowns and bridges could only be founded on half appreciation of the real facts. Properly constructed crowns might be looked upon as the most perfect substitution for a natural organ known to Nature. A well made band need not irritate the gum, and if it did the gum could very soon recede from contact with it and the irritation would cease. It was the abuse and not the use of crowns, with or without collars, which should be condemned. In discussing the paper Mr. Howard Mummery thought it could not be claimed that crowning had no vices and its virtues balanced their vices as nearly as possible. In his own experience fixed bridges were always more or less septic.

SECTION OF OPHTHALMOLOGY.

Thursday, July 28th, 1910.

THE PRESIDENT, Mr. Charles Higgens (London), in the chair. The following demonstrations were given: Methods of testing for colour blindness, by Dr. F. Edridge-Green; new operation for the production of filtration cicatrix in chronic glaucoma, by Dr. H. Herbert; use of new registering form of diaphragm test for measuring binocular vision, by Mr. N. Bishop Harman; use of carbon dioxide snow in trachoma, by Dr. Reginald Morton. The discussion for the day, the more chronic forms of anterior uveitis, was opened by Mr. T. W. Holmes Spicer (London) and Mr. Stephen Mayou (London). Mr. Spicer dealt with cases presenting scleritis. He considered the scleritis the primary lesion, the cyclitis, iritis, and keratitis being indications of its intensity. There was a greater incidence in young women of sedentary occupation. Attempts to find organisms in the lesions failed, and

he concluded, therefore, that they were due to the disturbing influence of toxins from distant inflammatory foci. Treatment by incision and possibly by subsequent touching with carbolic seemed most favourable, but relapses were frequent over many years. Mr. Mayou considered the bacteriology of anterior uveitis as manifested in irido-cyclitis. Unlike scleritis, the evidence of direct bacterial origin was certain. Tubercle, staphylococcus, and syphilis was the order of frequency of infection. Treatment by paracentesis was most favourable, and the use of vaccines prepared from the organisms isolated from the aqueous promised well. The President said the use of vaccines was a genuine advance. Mr. A. W. Ormond (London) dealt with the inflammation as seen in sympathetic cases. Dr. W. H. Brailey (Brighton) commented upon the fallacies of statistics of sex incidence. Dr. R. A. Reeve (Toronto) cited cases of homolateral cyclitis and follicular tonsillitis. Dr. Hill Griffith (Manchester) said that he frequently found pus in nodules of scleritis. Dr. G. A. Berry (Edinburgh) thought that the proof of toxic origin was much more difficult than bacterial. He was strongly of opinion that staphylococcic infection occurred in soils prepared by tubercle elsewhere. Mr. Bishop Harman (London) said his experience of the use of the Wassermann reaction in the diagnosis of these cases was good, but it tended to overthrow one's earlier ideas of clinical indications. Paracentesis he thought most satisfactory. Dr. Cecil Shaw (Belfast) agreed that scleritis was toxic in origin. Dr. Hugh Thompson (London) read a paper on the operative treatment of high myopia. Mr. Charles Wray (London), Mr. Hill Griffith, and Major Gidney, I.M.S., discussed the results of the procedure. Mr. A. H. Benson (Dublin) read a paper on a method of enlarging certain forms of contracted socket. He recommended the use of buccal mucous membrane for transplantation. Lieutenant-Colonel L. J. Pisani, I.M.S., read a paper on the conditions which may account for the greater prevalence of cataract in India. The influence of prolonged dry heat seemed most important. Major Gidney disagreed with his conclusions. Mr. MacGillivray and Dr. Cecil Shaw also spoke. Mr. A. F. MacCallan (Egypt) read a paper on five months' work in Luxor in 1910. The paper showed the efforts to check trachoma.

Friday, July 29th, 1910.

Dr. Risien Russell (London) opened the discussion on the diagnostic value of ophthalmoplegia, total and partial. Paralysis of ocular muscles, he said, must always be considered a serious sign; fleeting pareses were often a precursor of grave disease, such as disseminated sclerosis. Paralysis and spasm must not be confused; the latter was indicative of Thomsen's disease. The importance of paresis, together with other signs in the diagnosis of intracranial tumour was great, but it had to be distinguished from the rarer *migraine ophthalmoplégique*. Sudden onset of paresis did not invalidate sclerosis, nor necessarily imply vascular lesion. Finally he urged the importance of a full general examination, including blood, cerebro-spinal fluid, and specific tests. The President said he concurred in the gravity to be attached to most cases of paresis. Mr. Vernon Cargill (London) said that in many important cases diplopia was not noticed by the patient even with serious paresis and grave central disease. It was usually discovered by the ophthalmic surgeon. So also in the earlier pupillary signs the surgeon first detected them. He thought some single pareses were due to rheumatic affections. Dr. E. Farquhar Buzzard (London) dealt with pupillary phenomena. The importance of the Argyll Robertson pupil could not be underestimated. Similar phenomena had been found to coexist with cystic tumours of the third ventricle. He held that loss of pupil reflex without optic atrophy indicated grave disease within or about the third ventricle. Dr. W. B. Warrington (Liverpool) and Mr. N. Bishop Harman commented on cases of single muscle paresis without subsequent symptoms. The latter said they were sometimes referable to exposure to extreme cold, and that in such cases to give a grave prognosis was to court trouble. Dr. R. A. Reeve (Toronto) concurred; also Miss Amy Sheppard (London), who said there was sometimes tenderness over the affected muscle. Mr. MacGillivray (Dundee) said that he had watched such cases twenty years, and there had been no subsequent grave symptoms. Mr. Hill Griffith commented upon the use of electrical reactions as an aid to diagnosis. Dr. John Hern (Darlington) spoke of an experience identical with that of Mr. MacGillivray. Major Gidney thought that evidence of syphilis was of first importance. Dr. Risien Russell, in reply said the observations of Dr. Buzzard on pupil reactions were of great importance. He agreed with the occurrence of single paresis from excessive cold, but insisted upon the necessity for caution because many cases of single transient paresis developed disseminated sclerosis later. Mr. Bishop Harman (London) read a paper on the education of high myopes, describing the experimental establishment of "myope classes" in London County Council schools. Major G. H. Fink, I.M.S., read a paper entitled "A Plea for Efficient Drainage after Cataract Extraction." Major Gidney commented on it. The following resolution was then brought forward by Mr. Bishop Harman:

> In view of the importance of obtaining continuity of treatment of defects of vision in school children throughout the period of education, and of proper co-ordination of medical inspection and treatment, it is the opinion of the Ophthalmological Section of the Association that the organization of school clinics is desirable.

Mr. Walter Edmunds (London), Dr. Hugh Thompson (London), Dr. J. A. Menzies (Rochdale), Dr. Angus MacGillivray (Dundee), Dr. Beatson Hird (Birmingham), Dr. John Hern (Darlington), Mr. Hill Griffith (Manchester), Dr. Haldane Cook (Enfield), Dr. R. E. Harcourt (Liverpool), Dr. R. Leslie Ridge (Enfield), and the President spoke in support of the motion. Several of the speakers described successful school clinics already established. Mr. Philip Brooks (London) was opposed to gratuitous work, but objected to building costly State hospitals. The motion was carried with one dissentient. There were about thirty-five present. The meeting of the Section closed with a vote of thanks to the President.

SECTION OF OTOLOGY.

Thursday, July 28th, 1910.

THE proceedings on Thursday were given up entirely to a discussion on the diagnosis and treatment of infective labyrinthitis. It was opened by Dr. Robert Bárány of Vienna, who distinguished the following forms of the disease: (1) Acute purulent labyrinthitis. (2) Latent purulent labyrinthitis. (3) Fistula of the labyrinth with intact membranous labyrinth (circumscript labyrinthitis). (4) Fistula of the labyrinth with slight lesion of the membranous labyrinth. (5) Fistula of the labyrinth with severe lesions of the membranous labyrinth. (6) Serous labyrinthitis. The differential diagnosis between these diseases was made possible by investigation of the condition of the semicircular canals, the methods of which were partly originated, partly worked out by the author. The most important sign of the diseases of the semi-circular canals was the spontaneous vestibular nystagmus, which might be present either continuously (acute labyrinthitis), or only during attacks (circumscript labyrinthitis). The investigation into the function of the semicircular canals consisted in the experimental irritation of the canals by means of (1) turning, (2) rapid head movements, (3) syringing with cold and hot water, (4) galvanization, (5) compression and aspiration of the air in the meatus. All these different irritations produced quite definite forms of vestibular nystagmus, which must be observed carefully. Also, intracranial diseases produced vestibular nystagmus, especially those of the posterior fossa (cerebellar abscess, meningitis). The author gave the differential diagnosis between the diseases of the labyrinth and the intracranial complications which often accompany the labyrinth trouble. This diagnosis was based upon the observation of the

spontaneous nystagmus and the exact examination of the irritability of the semicircular canals. Dr. Bárány also gave a demonstration of his methods of investigating the condition of the labyrinth. Mr. Sydney Scott (London) followed with a demonstration of cinematograph photographs of the eyeball, showing the nystagmus produced by pressure in a case of fistula of the external semicircular canal, and also a series showing post-rotary nystagmus evoked by rotation about a vertical axis with the head erect. Mr. C. E. West (London) continued the subject. Infections of the labyrinth, he said, might be either pyogenic or non-pyogenic; the former constituted the main subject of this paper. Pyogenic infection might be either diffuse or localized to a portion of the labyrinth; this part might be restricted to the labyrinthine wall. Diffuse infection might be either acute or chronic; localized infection was always chronic. Necrosis of the labyrinthine capsule might take place in either acute or chronic conditions. The dangers and incapacities caused by infective labyrinthitis, treatment of infective labyrinthitis chiefly operative by the necessity of the case, the aims of operative treatment, the treatment of chronic local infections by the radical mastoid operation and curettage, the operative treatment of the diffuse infections, whether acute or chronic, by drainage of the labyrinth, the vestibulotomies—inferior and double—technique and after-treatment were all dealt with. Tuberculous labyrinthitis, necrosis of the labyrinthine capsule, non-pyogenic infections of the labyrinth, syphilis, mumps, and non-suppurative labyrinthitis in otitis media were also considered. Dr. Albert A. Gray (Glasgow) discussed the continuance of tinnitus after the destruction of the cochlea on both sides as pointing to a central or nervous origin of the symptom. Dr. Dan McKenzie (London) considered that spontaneous nystagmus was not to be relied upon alone as a localizing symptom. Dr. Dundas Grant (London) said that Mr. West and Mr. Scott had had an exceptionally high percentage of cases of labyrinthine suppuration, judged by the experience of a special hospital. Mr. Hunter Tod (London) agreed with Dr. Grant, and cited in support of that contention figures of a large general hospital. Dr. Jobson Horne (London) asked Mr. West the ratio in his hospital clinic of labyrinthine operations to the total number of mastoid operations. Mr. West, in reply, said he had no figures at hand, but stated that the ratio was about 1 in 10.

Friday, July 29th, 1910.

The President of the Association (Mr. Butlin) attended the Section during the earlier part of the proceedings on Friday morning. Dr. Jobson Horne (London) read a paper on deafness and diseases of the ear in relation to the public services and insurance, and their bearing upon forensic cases and the choice of a means of earning a livlihood. After the paper had been discussed, Mr. Butlin demonstrated a new aid to hearing. The instrument was constructed on the principle of the binaural stethoscope, but the sound receiving apparatus could be fixed behind the listener on the back of a chair, and could be rotated with the movements of the head, thereby overcoming the objections of having the apparatus in front of the listener and also the drawback of having to incline the head to a speaker. It was tested by the members present, and its advantages were appreciated. Mr. Macleod Yearsley (London) read a paper on the value of ossiculectomy in chronic middle-ear suppuration. The general opinion of those who took part in the discussion was against the operation after an extended trial. Mr. Mark Hovell (London) communicated some remarks on the connexion between affections of the mucous membranes throughout the body and middle-ear disease. The paper embodied the results of practical experience, and formed a valuable contribution. Dr. J. Stoddart Barr (Glasgow) reported experiments bearing upon the practicability of treating meningitis (septic and specific) by means of lavage of the cerebro-spinal subarachnoid spaces. This was a preliminary communication. Dr. Jobson Horne moved a cordial vote of thanks to the President of the Section—Dr. Edward Law—for the way in which he had discharged the duties, both scientific and social, of his office, and it was carried by acclamation.

Sections of Pathology and Bacteriology.

Thursday, July 28th, 1910.

A conjoint meeting of these Sections was held to discuss the question of complement deviation in diagnosis. Professor Wassermann, who was to have opened the discussion, was unavoidably detained, but his paper was read by the Honorary Secretary. He gave a summary of the history of complement deviation methods, and pointed out that it had so advanced that now it was possible to use the method to diagnose infective diseases where the organism was not yet known. He discussed the use of extracts made from normal tissues as compared with those made from syphilitic tissues, and held that extract of syphilitic tissues must be used to determine the presence of antibodies resulting from a spirochaetal infection, and so these extracts formed the most specific and most reliable antigen. Concerning the refinements that have been introduced to obtain a higher percentage of positive results, he said the non-heated serum gave too delicate a reaction. A partial arrest of haemolysis must not be regarded as positive, but merely doubtful. Further, with regard to the protozoal infections—for example, malaria, which gave a similar reaction—it was necessary first to determine that the patient had had no acute infective febrile disease up to the month before his serum was tested. He touched upon the duration of the reaction in patients treated with antispecific remedies, and pointed out that the virtues and superiority of each new remedy must be judged by the serum reaction, and concluded by mentioning other diseases in which the complement deviation method of diagnosis was possible—for example, glanders (Schütz), and even echinococcus disease and ankylostoma; in these two latter the reaction, obtained with a watery extract of the parasites or their capsules as antigen, disappeared as soon as all the parasites disappeared by operation or treatment. Dr. H. W. Bayly then gave the results of eighteen months' work at the London Lock Hospital; he used the original technique in preference to the various modifications, these latter necessitating an increase in the number of variant factors. He agreed that it was useful for diagnosis, and as showing progress of treatment as well as the best form of treatment. Professor Muir (Glasgow) discussed in detail the question of complement, pointing out that inhibition of complement might simulate fixation. Fixation was found in (1) the presence of an antigen and an antisubstance; (2) syphilitic reaction of Wassermann, which must be put in a separate class; (3) the presence of colloidal substances, and (4) surface absorption by gross organic particles in fluids. Each of these he dwelt on in turn. Henderson Smith (Lister Institute) also spoke on the structure of complement, which he had shown to consist of two fractions. In the ordinary technique of complement deviation only one of these fractions was completely deviated, the other remained free in an active state. This was only true when extracts were used, and not with the whole organisms themselves. Fleet Surgeon Bassett-Smith gave the results of his work, both clinical and pathological, on 1,166 cases of syphilis in hospital practice, and discussed the practical applications and the value of the test, and also the variations obtained with heated and unheated serums. Ivy McKenzie (Glasgow) discussed the individual properties of complement and organ extract. The deviation of complement should be estimated in terms of haemolytic doses absorbed. The extract should not exercise too inhibitory an effect on the complement, and should not be lytic by itself; for, if too inhibitory and if lytic, a normal serum may give a positive result. Dr. Carl Browning (Glasgow), in referring to the use of lecithin and cholesterin, said that pure lecithin might absorb a certain amount of complement from syphilitic serum, but the addition of cholesterin to the lecithin caused a marked increase in the amount of complement fixed. His method had proved of practical value from its certainty and

delicacy. Wakelin Barratt (Liverpool) had experimented with human and mouse cancers, but beyond a few cases of mouse cancer in which he did obtain complement deviation his results were negative. H. R. Dean (Lister Institute) discussed the relative values of extracts prepared from syphilitic and normal organs and had obtained better results with the former. He insisted on careful titration to eliminate the possibility of using a dose which would absorb complement with normal serum, and upon the standardization of all reagents. The meeting closed with a vote of thanks to Professor Wassermann for opening so important and valuable a discussion.

SECTION OF PATHOLOGY.

Friday, July 29th, 1910.

No set discussion took place in this Section, but a series of papers dealing with diverse subjects was read by members. Dr. Addis devoted his attention to the pathogenesis of hereditary haemophilia, advancing the theory that a deficient coagulability of the blood was the only constantly present pathological feature of the disease, and it alone was sufficient to account for the whole symptomatology. In every case that he had examined the severity of symptoms was directly proportional to the degree of diminution of coagulability of the blood. His experiments pointed to the fact that the cause of deficient coagulability in haemophilic blood was to be looked for in something which hindered the formation of thrombin. He had found no deficiency in the amount of fibrinogen, and no quantity of calcium was found capable of reducing the coagulation time of haemophilic plasma, the effect of adding varying quantities of calcium salts to normal and haemophilic plasma and fibrinogen being relatively the same. He had shown that there was no evidence that the diminution of coagulability was due to any deficiency in the amount of thrombokinase. He concluded that haemophilia was due to an inherited qualitative defect in the prothrombin, whereby it was less readily activated than normal prothrombin. Professor Sahli (Berne) mentioned his own work on the subject of haemophilia. He had found that the cause was due to deficiency of thrombokinase. He regarded it as a cellular anomaly (both corpuscles and endothelium of vessels), and Nolf (Liége) had also arrived at the same conclusion. Drs. Glynn and Knowles (Liverpool) then read a paper on some fatal cases of primary thrombosis of the pulmonary artery. In all their cases they found evidence (lamination, pigmentation and retraction of clot) that the clots had been laid down slowly. This, together with the facts that deaths occurred in many cases in the early morning, when the pulse was physiologically slowed, and in most cases no systemic cause could be found, led them to believe that primary spontaneous thrombosis was no less common than embolism—perhaps more frequent. Dr. Goodhart thought that embolism must be more common than thrombosis, though he had seen many cases of this latter condition, and Dr. Box remarked that the cause of sudden death was the supervention of embolus on pulmonary thrombosis. Dr. Braxton Hicks brought forward a paper of medico-legal value. As the result of experimental artificial respiration on stillborn children he had corroborated the older idea that the signs of live birth, namely, aëration of lungs and air in stomach could be produced by artificial methods, which, however, must be carried on for some time. Dr. G. W. Goodhart, in a paper on chloroform necrosis of the liver, pointed out that in 70 per cent. of inhalation experiments on rabbits, marked changes, varying from fatty degeneration to complete necrosis, occurred at the centre of the lobules. Similar but more marked results were produced by subcutaneous injections of certain quantities. Dr. Chisholm gave a preliminary report on the blood volume of rats with implanted sarcomata. His experiments showed that the volume of blood might be increased and the oxygen capacity decreased in tumour rats as compared with normal rats. Dr. Price Jones described some methods of estimating variations of measurement in diameters of red corpuscles. Dr. Beckton contributed further observations on the absence of Altmann's granules from malignant new growths. His paper read before this Section last year had been further extended to include the greater number of cases of sarcoma which he had been able to obtain. It appeared that by this observation it might be possible in future to distinguish between malignant growths and simple or inflammatory lesions, though as yet it was not of very definite diagnostic value save for distinguishing between sarcomata and inflammatory infiltrations. Dr. Gordon Ward's paper on polychromasia and the pathology of haematomata aroused some adverse criticism from Dr. Boycott, who held that polychromasia was undoubtedly a regenerative phenomenon. Dr. Boycott then described his experiments on oleic acid anaemia. The President brought the meeting of the Section to an end after congratulating the members on the excellence of the papers.

SECTION OF PHARMACOLOGY AND THERAPEUTICS.

Thursday, July 28th, 1910.

BEFORE calling for the opening of the discussion of the effects of digitalis on the human heart, the President (Professor A. R. Cushny) said that digitalis, as was well known, had a double action on the inhibitory cardiac apparatus, and on the heart muscle. He asked clinicians whether these two factors were properly balanced in digitalis, and whether the therapeutic effect might be improved by augmenting one or other factor. Experimental investigation could certainly contrive to supply the needs of the clinician in this matter. Clinical opinions must, however, be backed by actual measurements and standards. He called upon Professor Wenckebach (Gröningen) to open the discussion. Professor Wenckebach paid a tribute to the success of British physicians in investigating this difficult subject. He exhibited a number of tracings showing the twofold effect of digitalis—slowing of the beat and irregularity of pulse. These two effects were always found together. Where slowing occurred there was always also irregularity. This was due to strong vagus action. The strengthening of the heart's action was due, in all probability, to the action on the muscular tissue. In small doses there was increase of tone, with a deeper diastole and a deeper systole. In larger doses the diastole increase disappeared, and the systole increase remained. It was not right to limit the use of digitalis to conditions where there was loss of tone. Therapeutic doses might do harm by lessening conductivity, giving rise to partial heart-block. The heart muscle became less excitable with small doses. He had known extra-systoles to disappear under treatment with small doses. In large doses excitability was increased, and extra-systole might arise. In most cases, also, vaso-constriction was affected. All these influences worked in different intensity, according to the dose, form, and condition of the heart. In a slow heart, the slowing action was not wanted. If there was no oedema, the diuretic action was not wanted. In high blood pressure, the vaso-constriction might be a disadvantage. It was necessary to recognize the part played by these different and contradictory factors. Dr. James Mackenzie (London) described the scheme for testing the action of digitalis which he carried out at the Mount Vernon Hospital. The teaching was so contradictory on all points, that he had determined to make as it were a fresh start. In estimating the effect upon the patient of digitalis, he paid much attention to subjective sensations, and changes in these often preceded the objective signs. The pulse and respiration rate and blood pressure were taken before and after exercise. All drugs used in the work were submitted to Professor Cushny for examination. In these and other ways he was fast accumulating a mass of trustworthy data upon which judgement might be formed. Dr. Thomas Lewis (London) read a paper upon the characteristic reaction of the heart to digitalis when the auricle was in fibrillation. Dr. H. H. Turnbull (London) described some of the results which had already been obtained under Dr. James Mackenzie. The discussion was continued to a late

hour by Dr. Windle (London), Sir Lauder Brunton (London), Dr. W. T. Ritchie (Edinburgh), Sir T. Clifford Allbutt (Cambridge), Dr. Crichton Miller (San Remo), Dr. J. Gossage (London); Professor Wenckebach briefly replied.

Friday, July 29th, 1910.

On the last day of the meetings of this Section Dr. H. H. Dale (London) read a paper upon the active principles of ergot. He traced the history of pharmacological research into the action of this drug. His own work had led him to recognize the presence of a specific alkaloid ergotoxin, to which were due the characteristic gangrene and other toxic symptoms of ergot; and, in addition, he had found certain bases which also arose in the putrefaction of proteins. Careful clinical observation must determine whether the therapeutic effect was due to the specific alkaloid or to the bases. If the latter, then ergot, though of great pharmacological interest, was without practical importance in therapeutics, for these bases could be more readily procured from other sources. Professor Unna (Hamburg) read a paper entitled, "New Facts Concerning Chrysarobin." He had been able, in conjunction with Dr. Golodetz, to prove the presence of oleic acid in certain parts of the skin. This circumstance explained the different effects of the drug in different parts of the body in psoriasis, for he had proved that oleic acid was able to produce the necessary oxidation of chrysarobin into the active "oxychrysarobin." It was therefore right to combine with chrysarobin an ointment containing oleate of lead if the cure of psoriasis was to be quick and thorough. Professor Hans Meyer (Vienna) read a paper upon the action of calcium. Especially he dwelt upon its action in preventing the appearance of inflammatory exudates. If a dog were poisoned with thiosinamin, marked pleural and pericardial effusion was the result, but this did not occur if calcium had been previously administered. Wright had already noted that serum exanthemata could be prevented by its use. He thought the change more due to a change in the vessel walls than to any alteration in coagulability. The comparative therapeutic value of the organic and inorganic compounds of the halogen elements—phosphorus, iron, and arsenic—was then discussed by Dr. Fortescue-Brickdale (Bristol). Dr. P. P. Laidlaw (London) read a paper upon the action of hydrastine and cotarnine. Clinical papers upon the treatment of morphomania and of lobar pneumonia were contributed by Dr. Crichton Miller (San Remo) and Dr. A. J. Mathison (London) respectively. Mr. Ninian Bruce's contribution was upon the action of local irritants.

Section of Physiology.

Thursday, July 28th, 1910.

The subject for discussion, the factors that make for an efficient circulation, was introduced by Professor E. A. Schäfer (Edinburgh), who stated that it was on the relation of certain factors that efficiency depended. These were the rate of rhythm, the force of the individual beats, and of the tone of the heart. The respiratory system also played a very important part. Another absolutely essential factor was the tone of the vessels. The work of physiologists had established beyond all doubt the important connexion between the nervous and vascular systems. Certain facts were, however, not easily explained by holding that the balance rested with the nervous system; for example, the recovery of tone after complete severance of parts of the vascular from the nervous system. He then went on to speak of the influence of extracts of certain glands on the circulation—the suprarenal and the pituitary, and probably also the thyroid. These glands possessed substances—which might be excreted into the blood—which acted as depressors. If both these constrictor and depressor bodies were formed, then in addition to the nervous control there was chemical control. Another way in which these glands might help the circulation was by stimulating the nervous system. That such a stimulating action might exist was rendered highly probable by the recent observations of the favourable influence of extract of pituitary body in surgical shock. Following Professor Schäfer's paper there was an extremely interesting discussion, in which, amongst others, the following spoke: Dr. G. Oliver (Harrogate), Dr. Leonard Hill (London Hospital), who had made some interesting and valuable observations on the effect of posture on blood pressure, Sir James Barr (Liverpool), Professor B. Moore (Liverpool), and Dr. Alex. Haig (London).

Friday, July 29th, 1910.

The last day's work was opened by a paper by Dr. Krogh (Copenhagen) on the estimation of the blood gases by means of his modification of the aërotonometer. He also gave a demonstration of the method of using the instrument. Discussing the causes of absorption in the lungs, he stated that his experiments had led him to the conclusion that the exchange was due simply to diffusion, that there was no evidence of any secretion taking place. He found that the oxygen tension of the arterial blood was always lower than the oxygen tension of the alveolar air, whereas the carbon dioxide tension of the blood and of the air agreed very closely. Dr. J. S. Haldane (Oxford) stated that he could not entirely agree with Dr. Krogh. He admitted that the diffusion theory could account for the condition found during rest, but not when there was a great demand for oxygen, as occurred during work and in high altitudes. Then the only possible explanation was that a definite secretion of oxygen took place. Professor Starling (London) stated that he was in favour of the diffusion theory under all conditions. Dr. Haldane then read a paper on the causes of absorption in the lungs in animals and man. This paper practically amounted to a continuation of the discussion inaugurated by Dr. Krogh's paper. The experiments recorded were carried out on animals and man after the administration of known amounts of CO. The speaker defended vigorously the necessity of a physiological stimulus for the exchange. Dr. Buckmaster (London) and Professor W. H. Thompson (Dublin) also spoke, and the interesting and valuable discussion was finally closed by the reply of Dr. Krogh. Dr. Ross Taylor (Glasgow) then read a short paper on the excretion of creatin in diabetes mellitus. He found that this substance was constantly present in the urine of diabetics. He then briefly discussed its significance. Dr. C. Gordon Douglas (Oxford) next gave a demonstration of the production of Cheyne-Stokes or periodic breathing. He showed how the condition depended on depression of the carbon dioxide value and the oscillation in the amount of oxygen present. Finally, Dr. Edridge-Green (London) gave a demonstration of his instrument for testing colour vision, and read a paper on some visual phenomena connected with the yellow spot. He pointed out that the fovea and its surroundings might at one time be the least sensitive part of the retina and at another, after exposure to light, the most sensitive. He then gave a description of the methods employed in the investigation and the theory of colour vision which his experiments had led him to. The meeting, after a few remarks by the President (Professor Thompson) then closed.

Section of Psychology and Neurology.

Thursday, July 28th, 1910.

A discussion on the treatment of tabes dorsalis occupied the whole of the second day's proceedings. It was opened by Dr. Risien Russell, who, premising that all treatment should be founded on etiology, and accepting as beyond refutation that syphilitic infection was the *fons et origo* of the disease, maintained that every case of tabes, with certain reservations, should be subjected to thorough antisyphilitic treatment. Inunction, as carried out at Aix-la-Chapelle, gave the best results, either alone or combined with intramuscular injections of mercury. His personal experience of the latter had been small, but he had met with cases unsuccessfully treated by injection which had improved under inunction. Mercury by

the mouth was inefficacious, and only to be prescribed when for some reason neither inunction nor injection could be employed. He had never found any serious ill effects from the treatment, and had not met with any bad cases of salivation. Cases should be treated irrespective of the length of the interval between primary infection and onset of the tabetic symptoms, even those in whom the infection was remote doing well. A large proportion of the cases of tabes dorsalis he had met with had been practically untreated for their syphilis, the cases being either of mild primary infection or treated for their syphilis for a few months. As a result he had found in many cases a marked improvement, at times even the knee-jerks returning, and the pupillary signs disappearing. Dr. Russell was followed by Dr. Ferrier, who quoted statistics in disproof of the asserted tabo-genetic effect of mercurial treatment. As to the results of treatment, he would distinguish between what Grasset called an "anatomical cure"—which he considered an impossibility—and a "clinical cure," which should be considered possible in all cases. Dr. Ferrier was followed by Dr. Feibes and Dr. Lieven (Aix-la-Chapelle), both of whom read capital papers in fluent English descriptive of the methods they employ (mainly inunction) with, they said, excellent results. In their experience the intramuscular method was attended with risks, as the result of mercurial accumulation in the gluteal muscles. Dr. Judson Bury, who expressed his doubt of the universal validity of the dictum "no syphilis no tabes," thought in consequence that mercury was not always to be recommended, and maintained that every case should be treated on its own merits. Dr. Farquhar Buzzard, who found himself in almost complete agreement with Dr. Russell, thought that oral treatment should not be absolutely condemned, and also that no limit should be set to the duration of antisyphilitic treatment. Dr. Gullan (Liverpool), having given a favourable account of a small number of tabetics whom he had treated by intramuscular injection, which he preferred to inunction, and a good number of others having spoken, Dr. Risien Russell replied. The publication in full of this discussion will doubtless do much to lighten the pessimism with which the antisyphilitic treatment of tabes is at present regarded in this country.

Friday, July 29th, 1910.

On the last day of the meetings of this Section many papers of great interest were read, and none was listened to with more attention than that of Professor Bárány of Vienna, who, speaking in English, delighted his auditors by his illuminating description of certain new and original methods of examination concerning the relationship between the vestibular apparatus, the cerebellum, cerebrum, and spinal cord. In his theoretical exposition of his subject, the speaker distinguished between spontaneous disturbances of equilibration and those experimentally produced. Proceeding to describe these latter in detail, produced by turning tables or by syringing first one ear and then the other with cold water, etc., Professor Bárány first explained diagrammatically their underlying neuro muscular mechanism, and then turned to a detailed account of the departures produced in the phenomena of experimental equilibrational disturbances by diseases of the cerebellum, cerebrum, and cord. Professor Bárány, having been warmly thanked by Dr. Alexander Bruce, Dr. A. S. Barnes, and others, replied briefly to questions addressed to him by the President. Dr. G. Thomson (Norwich) next read a paper on the need for a post-graduate curriculum and diploma in psychological medicine, which received the approval of the whole Section. The paper was followed by a resolution, moved by Dr. Thomson and carried unanimously, in favour of approaching the Council of the British Medical Association on the matter in the hope of action being taken. Dr. Alexander Bruce (Edinburgh) then showed on the lantern screen a series of photomicrographs of what he believed to be a unique case of multiple neuromata of the spinal cord, which had the peculiarity of being situated entirely in the walls of the vascular lymphatics. Dr. Edwin Ash (London) then read a somewhat diffuse paper on the psychological treatment of certain functional conditions in which he claimed to have obtained favourable results by the induction of hypnoidal states in many so-called functional disorders, including insanity. No discussion followed, the time remaining short, and a capital paper, which deserved much more consideration than could possibly be given to it, by Dr. W. A. Jolly (Edinburgh) on the knee-jerk and simple reflexes, brought a very successful meeting to a close.

SECTION OF RADIOLOGY AND MEDICAL ELECTRICITY.

Thursday, July 28th, 1910.

DR. S. JELLINEK (Vienna) delivered an address on the subject of electro-pathology, which is closely studied in the Austrian capital, and represented by a chair in the university. The danger of an electrical current, he said, depended, not merely on the number of volts, but upon various other connected factors, such as amperage and duration of contact, and also equally upon certain physiological and mental conditions in the individual. A point about first aid in electrical injuries was the necessity of laying the victim down with his head elevated, so as to minimize the cerebral haemorrhage. He urged that the people generally, especially workmen in electrical undertakings, should be instructed by means of pictures illustrating the origin and consequences of accidents, and the way in which they might be avoided. He showed some remarkable photographs of the effects of the current upon the flesh. Dr. Leopold Freund followed with a paper dealing with the conditions in which *x*-ray treatment was most likely to be of value. He urged that every treatment with the *x* rays should be preceded by preparatory treatment, all crusts and scales which would impede the histological effect of the rays being thoroughly removed, either chemically or mechanically. He believed that in severe skin affections better results than those hitherto achieved could be recorded if previous curettage and cauterizing were practised, and exposure delayed until the scurf had separated. A communication was then read from Dr. Dawson Turner and Dr. T. J. George, detailing their experiments on the effects of the *x* rays on the growing brains of rabbits. They were unable to draw any conclusion with regard to microscopic changes, but there were some undeniable gross changes, including loss of weight in all the animals during the period covered by the exposures. The experiments really indicated starting points for further research. The discussion on this paper centred round the question of possible danger to the brain of children from exposures for ringworm, but none of the half-dozen experts who spoke could instance a case of injury to the brain definitely attributable to the *x* rays, although most of them stated that they did not care to employ the rays in the case of very young children. The attention of the Section was then drawn to the subject of ionization. A paper by Dr. C. F. Bailey (Brighton), on radiant heat and iodine ionization in such conditions as rheumatoid arthritis, chronic synovitis, and, indeed, anything in which there was a new or recent deposit of fibrous tissue tending to pain on movement or limitation of movement, led to a long discussion. Dr. Bailey preferred a radiant heat sitting, followed immediately by iodine ionization. Iodine ions, in his opinion, were more valuable than the other halogen ions for solvent action on fibrotic deposits. Dr. Lewis Jones said that he had most encouraging results with ionization in the treatment of the crippling and painful swelling of the knees, so frequently met with in middle-aged women. Professor Leduc (Nantes) detailed some remarkable cures with ionization in the treatment of ankylosis and described his technique. Two other papers, undiscussed owing to shortness of time, concluded the session. One was by Dr. J. B. Simpson (Golspie), giving typical instances of the advantages of the *x* rays in country practice, particularly in the diagnosis of fractures and bone diseases. The other paper, by Dr. L. A. Rowden

Leeds), was a plea for a careful screen examination in the *x*-ray diagnosis of renal calculus. He claimed that with a proper technique, which he outlined, the *x*-ray diagnosis of renal calculus was infinitely more accurate than the history of the case and the clinical signs and symptoms all put together. At the same time he did not suggest that the *x*-ray examination should come first, but that it should confirm or negative the diagnosis already made by the physician or surgeon.

Friday, July 29th, 1910.

Dr. G. A. Simmons (St. George's Hospital) read the first paper of the morning, giving an instructive account of the organization of the *x*-ray department in a general hospital. He dealt with the construction and planning of suitable apartments, and the methods of routine administration which the radiographer and his assistants might employ with advantage. He said that the two points he had always kept in mind as being necessary in order to make the *x*-ray diagnosis side of his work of value to the hospital were, first, to be very prompt in furnishing the necessary plates and reports, and, secondly, to criticize every plate severely, and not to be satisfied unless it showed the condition so clearly that it was decipherable by anybody possessed of a pair of eyes. Dr. W. S. Lazarus-Barlow then described some further experiments which he had been conducting at the Middlesex Hospital on radiation and biological processes in connexion with cancer research. The paper was really an addendum to his Croonian Lectures last year. He expressed himself as conscious of a great dissatisfaction that he could present so little that was definite. It was true that there could now be no doubt that radio-activity was capable of influencing biological processes. But the difference between the action of a Crookes tube or a milligram of radium upon the ovum of a worm or upon an insect and that of the ever-present, slightly radio-active environment in which more complicated living organisms passed their life-history was so enormous that sometimes he hesitated to hope for great results. Dr. Barclay (Manchester) showed a series of radiographs giving the appearance of the normal and pathological stomach. The stomach he described as being full of spasmodic trickery; nevertheless, the simple method of *x*-ray examination with the bismuth meal could yield a great deal of information as to its condition. He believed it possible to get fairly close to a correct diagnosis in nearly every pathological case. Hour-glass stomach should always be diagnosed. Carcinoma generally gave some hints as to its presence, or at any rate as to the need of operative interference, owing to pyloric obstruction, before it was diagnosed clinically. Pyloric obstructions should always be made out if well marked, while the examination frequently revealed a suggestion of the presence of gastric ulcer and cicatrices. Professor Wenckebach described a new stand for screening examination in *x*-ray work, which was criticized in the subsequent discussion by Dr. Barclay and Mr. Thurstan Holland as affording inadequate protection. Dr. Harrison Orton and Dr. Alfred Jordan each read a paper on the *x*-ray diagnosis of phthisis. Dr. Jordan pointed out—and the matter was emphasized by Dr. Knobel and by other speakers in a discussion—that although the Roentgen ray method was an indispensable diagnostic aid in all pulmonary diseases, an *x*-ray examination of a disease that was no longer active—the relics of a spent disease—would show practically the same lesion that was in evidence before the course of treatment. A healed fibrous cicatrix gave rise to a shadow in the lung very similar to the one due to an active congestive lesion. Dr. Orton also believed that the *x*-ray examination should only be considered as an aid to diagnosis, and not a method to supplant those at the disposal of the physician. Dr. A. Howard Pirie brought to the notice of the Section several cases in which he had used the *x* rays successfully in the treatment of hyperidrosis. In hyperidrosis frigida as well as a simple hyperidrosis he had found the rays of great service, without any baneful results. There was partial epilation. Dr. Lewis Jones and others discussed the paper, and one of Dr. Pirie's patients—a medical man—bore testimony to the permanence of the cure. On the motion of Dr. Lewis Jones, a cordial vote of thanks was passed to the President and Honorary Secretaries of the Section.

SECTION OF STATE MEDICINE.

Thursday, July 28th, 1910.

THE Section of State Medicine had a busy morning, the chair being occupied at first by Lord Ilkeston, and later by Mr. Charles E. Paget (M.O.H., Northampton). The first discussion was on town planning in relation to public health. This was opened by Dr. John Robertson (M.O.H., Birmingham), who described as one of the most important aspects of town planning the necessity for distributing the population over greater areas than at present. The number of houses per acre should be reduced. The number could not be uniform, but for new cottage houses it should not be more than an average of twelve per acre. This could only be rendered possible if traffic roads were constructed partly at the expense of the local authority, while non-traffic roads were cheapened and "adopted." Almost as necessary as spreading the population was assistance to manufacturers by cheap land, canal, railway, gas, electric power, and other needful adjuncts. Dr. Hope (M.O.H., Liverpool) submitted plans showing the transformation of large central areas of the city of Liverpool. At a cost of a million sterling the corporation had removed many insanitary areas and re-erected appropriate dwellings upon the sites. Mr. T. C. Horsfall, J.P. (Manchester), said that, as Mr. John Burns in the Housing and Town Planning Act had taken away with one hand what he had given with the other, there must at an early date be an amending Act. He considered that the average English house was a better type of human dwelling than the average dwelling in any other part of the world. Every unnecessary inch of macadam was an evil, and bad results had been brought about by the mania for unnecessarily wide streets. He considered that the English workman lived under much better conditions than the German, and pointed out that the death-rates, especially the tuberculosis death-rate, and infant mortality were very much higher in German than in English towns. In his opinion these evils were encouraged by the use of town-planning powers to build too wide streets. The discussion was continued by Dr. Fremantle (M.O.H. Herts), who gave some interesting details of the garden city of Letchworth, plans of which he distributed to the meeting. He considered that there should be a limitation of houses to 12 per acre. Dr. Robertson replied. Dr. George Reid (County M.O.H. Staffordshire) in a paper on the administrative control of ophthalmia neonatorum, said the disease was the cause of at least one-third of the cases of permanent blindness. The financial return would amply warrant the trifling expenditure needed to cope with the disease, for the cost of educating a blind child amounted to £500, compared with £30, the cost of educating an ordinary child. The procedure was simple, consisting of (1) compulsory notification of the disease, (2) provision for medical treatment and skilled nursing of the cases under Section 133 of the Public Health Act, 1875. Mr. Bishop Harman (London) suggested, in addition to notification, that the doctor in charge of a case should be required to send to the public bacteriological laboratory for microscopical examination two film preparations of the pus in order to ascertain the presence or absence of Neisser's micrococcus. He also suggested that the school medical officer should be called in by the medical officer of health to give expert advice in these cases. After the subject had been further discussed, Dr. E. H. T. Nash (M.O.H. Wimbledon) disagreed with the statement which had been made that every case notified was a patient saved, as this entirely overlooked

the work of the general practitioner, who at the present time had a very considerable knowledge of eye diseases. Dr. Reid briefly replied. A paper by Dr. Niven (M.O.H. Manchester) on the etiology and prevention of summer diarrhoea was read in his absence by the Honorary Secretary. It offered reasons for believing that all loose manure and other fermentable refuse should be removed to a distance from centres of population at intervals not exceeding a week. Dr. Clements (M.O.H. Beckenham) read notes of an investigation into 44 cases of summer diarrhoea. He was quite convinced that the disease was spread by house flies, and during its prevalence had made experiments in the destruction of flies. Sprays of various kinds were used. Formalin was unsuccessful; better results were obtained with izal, which did not immediately kill the flies; but when it was sprayed over them they became stupefied, and could easily be collected and destroyed. Dr. Brown (Bacup) considered that the house fly as a cause of disease was "not proven," and emphasized the importance of keeping hens in a stable as a means of preventing nuisance from flies. The proceedings of the Section for the day concluded with an interesting paper by Dr. Robert Milne, medical officer to Dr. Barnardo's Homes, on the home treatment and prevention of scarlet fever. Dr. Milne's views have previously been ventilated in this JOURNAL. He does not believe in the isolation of scarlet fever patients, whom he allows to sleep in the same ward, and sometimes even in the same bed, with non-infected and even with surgical cases. During the first four days of a scarlet fever case, commencing as early as possible, he has pure eucalyptus oil gently rubbed in, morning and evening, all over the body. This is repeated once a day till the tenth day of the disease. He swabs the tonsils with 1 in 10 carbolic oil every two hours for the first twenty-four hours. He considers that if his method were universally adopted, it would result in an enormous saving to the nation, as isolation hospitals would no longer be necessary.

Friday, July 29th, 1910.

The concluding meeting of this Section was very largely attended, a number of ladies being present, including H.E. The Countess of Aberdeen. During the first part of the proceedings the chair was taken by Dr. S. Monckton Copeman, F.R.S., and later on by Lord Ilkeston, President of the Section. The first discussion was on the provision of medical treatment by local education authorities. This was opened by Dr. James Kerr, Education Medical Officer to the London County Council. He started with the definite statement that the medical inspector should not undertake treatment. He detailed the different ailments for which treatment might be required, and said that the doctors must be paid for their work, and the whole scheme so organized that every one should have relief with the least cost and the least friction. The Medical Treatment Act stood in the way of successful general provision of treatment, but the London County Council had made temporary arrangements with hospitals and other institutions. The Council paid 2s. per head for every child treated at hospital, and also £50 per annum per half-day weekly worked by a medical man in such treatment. In districts beyond reasonable reach of hospitals the suggestion was made that a committee of medical men might arrange to work a centre for treatment, and such attempts were being made in Norwood, Hampstead, and Wandsworth. In his opinion the British Medical Association signally failed, in the condemnation by many Branches of school clinics, under the idea that general practitioners would not be allowed to do the work. Professor Kenwood (Stoke Newington) said that they should first inquire to what extent their existing provisions succeeded in obtaining ameliorative treatment for defects disclosed by medical inspection. From tables produced he found that only 25 per cent. of children had been relieved. The main difficulty experienced was in respect of defects of vision and hearing, ringworm, and conservative treatment of the teeth. With regard to visual defects, he recommended that eye-testing centres should be established in market towns on market days, and the services of practising ophthalmic surgeons availed of on contract terms, and provision of spectacles arranged. Travelling dental clinics might also be established. He laid particular stress on the importance of insisting on parental responsibility for providing medical treatment, and advocated legal action in appropriate cases of neglect. He did not believe in the scheme of subsidizing voluntary hospitals out of the education rate, and thought that the provision of medical treatment might urge them on the road to nationalization of medical service. Dr. Bennett Weaver (M.O.H. Abertillery) gave his experiences of providing treatment in a small district. Dr. William Hodgson (Crewe) strongly advocated the claims of the general practitioner to carry out treatment, and objected to the nationalization of the medical service. He considered it most unfair to assume that the Poor Law had broken down, and thought the medical profession ought to go slowly and use the means already at its disposal before resorting to new and untried methods. Mr. Cyril Jackson, Chairman of the Education Committee, L.C.C., said they ought to endeavour to bring home to the parents the duty of getting advice for their children, and paying for it. He had no idea of disparaging the general practitioner, but found that parents would not take their children to him. Dr. Drury (Halifax) and Dr. Nash (Wimbledon) urged the claims of the general practitioner, who should be paid for his work and the time occupied in it. Drs. Cooper-Pattin (Norwich), Savage (M.O.H. Somersetshire), Bygott (Barking), Meredith Richards (Croydon), and Wilshaw (Worthing) also spoke, and Dr. Kerr, in reply, said that he had been misunderstood about the general practitioner, and thought the local authority should choose the best men, general practitioners or otherwise. He certainly did not believe in the future of the Poor Law, particularly in respect to school children. Sir William Collins, M.P., opened a discussion upon the reform of death certification. He emphasized the unsatisfactory condition of the present system, and of Coroners' Law. He pointed out that there was very inadequate machinery for bringing about any inquiry into the cause of deaths, especially in the case of infants. He referred to the great difference in the number of uncertified deaths in various parts of the kingdom—1.5 per cent. of deaths being uncertified in London, and 45 per cent. in Inverness-shire. He considered that a coroner should have some knowledge of the law of evidence, and advocated the appointment of a medical investigator into the causes of death. Although the medical profession was to a certain extent suspect in Parliament, yet the legislator was anxious to listen to the last word of science if it could only be assured that the latest word was really the last. He pointed out that under the existing law a coroner could only order a *post-mortem* examination when an inquest was held, whereas there were many instances in which, if a *post-mortem* examination were held, an inquest would be unnecessary. The Right Hon. Dr. Farquharson said, as an old parliamentary hand, he recognized the difficulty of getting anything in the way of legislation through the House of Commons by a private member, especially if a medical man, but if Lord Ilkeston and Sir William Collins would peg away in both Houses they would in time remove the scandal of many people being smuggled into their graves without proper certification. This was most important from the point of view of advocates of cremation, of whom he was one. Drs. Barker Smith, Drury (Halifax), McWalter (Dublin), and Jackson (coroner for Croydon), all spoke in favour of the appointment of medical coroners, and the last speaker advocated payment for death certificates. Mr. Cotes-Preedy spoke as one who was both medically and legally qualified, and was in favour of legal coroners. Dr. Bygott also spoke, and Sir William Collins briefly replied. Dr. F. E. Fremantle (M.O.H. Herts) read a paper on the influence of part-time medical officers of health on public health, in which he expressed views favourable to the part-time medical officer. The proceedings were closed by a vote

of thanks to the Chairman (Lord Ilkeston), and congratulations on his elevation to the peerage, proposed by Sir William Collins, seconded by Dr. Herbert Jones (Hereford), and carried by acclamation.

Section of Surgery.

Thursday, July 28th, 1910.

Before the regular work of the Section began, Professor Depage of Brussels gave an interesting demonstration of his method of suturing fractures. Professor Theodore Kocher opened a discussion on the surgical treatment of exophthalmic goître. He began his address by a graceful reference to the fundamental work of the President of the Section upon the physiology of the thyroid gland. He went on to indicate some advances in methods of diagnosis. The blood changes were of such importance as to demand routine examination. With very few exceptions, the leucocytes were greatly diminished, sometimes by more than 50 per cent. The diminution was exclusively polynuclear. Lymphocytes were increased by 20 to 50 per cent., but the increase was, in general, relative only. Following excision of one lobe or ligature of the superior pedicle, there was a definite return towards the normal blood picture. If the case was "cured" the blood would be found normal. Of course, there are analogous changes in other diseases, but it was noteworthy that in myxoedema there was a leucocytosis. Not every hyperthyrosis was Graves's disease. There may be hyperthyrosis at puberty, in pregnancy, and after some infections. There is, then, a physiological need for excessive secretion, and it would do much harm to operate. Contrary to what was found in myxoedema, in Basedow's disease the coagulability of the blood was diminished in rapidity and intensity. He was unable to understand the view of some American surgeons who held that hypothyrosis was characteristic of Graves's disease. It was noteworthy that the experimental production of these blood changes by exhibition of iodine failed in thyroidless animals. Iodine given in large doses to nervous people the subjects of ordinary goîtres might produce all the symptoms of Graves's disease. The administration of thyroid extract in large doses was only capable of giving rise to symptoms of Graves's disease in some individuals, particularly those in whose families there were cases of the disease in question, or of diabetes. No symptoms could be induced in those with thyroid aplasia. The incidence of the disease after fright, fatigue, or great emotion was witness of the influence of the nervous system in its production. Experimental work, too, went to show that there occurred what might be described as a "diarrhoea" of the thyroid secretion. The possible existence of trophic or secretory nerves to the thyroid was good warrant for adopting Crile's suggestion to ligature not the superior artery alone but the whole superior pedicle. So far as therapeutic measures went, he felt that if operation were out of the question a surgeon should do nothing himself and tell his patient to do nothing too. He referred to the influence of rest and diet, and incidentally alluded to the deleterious influence of sea air. Before operating it was of the utmost importance to examine with precise care all the other organs, for in the late stages many serious organic lesions were found associated and precluded the possibility of operative cure. Amongst 4,394 operations for goître, 469 were for Graves's disease, and his total mortality was 3.4 per cent. Moreover, the mortality figure had dropped progressively with his increasing experience. Of the last 72 cases but one had died. Whilst advising careful attention to the contra-indications, such as glycosuria and the status lymphaticus, he held that the physician who delayed operation in the early stages was accepting a grave responsibility. Dr. Hector Mackenzie, while admitting that the symptoms of the disease were attributable to the excessive activity of the gland, pointed out that the severity of the symptoms bore no relation to the size of the thyroid. In the very worst cases there might be no enlargement. The question he sought to answer was, "what was the cause of the increased activity?" He was impressed with the remarkable causative relation of mental strain, grief, worry, anxiety, or fright. There was, indeed, a striking parallelism between the symptoms of great terror and those of Graves's disease, extending, it was said, even to the occurrence of swelling of the gland. Was it the toxins of fatigue which constituted the effective stimulus? He directed attention to the relations of the thymus to the condition. In all the cases he personally had had opportunity of examining at necropsy the thymus was enlarged. Theoretically, he could not think that thyroidectomy could cure, and he had never seen a case. Of 13 cases at St. Thomas's, 5 were fatal, 3 were *in statu quo*, and 5 were "improved." He could not believe that Professor Kocher got the same class of case to operate upon as was found in London. Medical treatment was increasingly successful, and in time some antidote to the causative toxin would be discovered. Dr. Bruce (Toronto) said he had operated on 22 cases; 20 were successful, 1 died of pneumonia, and 1 was operated upon in the acute stage, and died almost immediately after operation. There were, however, collective figures showing a mortality of only 4 per cent. in over 1,000 cases. Sixteen per cent. were absolute cures and 85 per cent. were able to resume normal life. He advised the use of ether with preliminary morphine as the best anaesthetic. Mr. Heaton said there was a good deal of confusion of cases. Proper selection was essential. An anaesthetic could always be given in cases that were suited to operation at all. Mr. Robert Campbell noted the necessary distinction between the primary disease and that arising as a secondary condition in cases of simple goître. In the latter class operative results were uniformly good. He would like to know what was the mortality of the disease *per se*, and what the degree of incapacity for work due to it. Dr. Kennedy believed that the dangers of operation had been exaggerated. He had found local anaesthesia with cocaine satisfactory. In acute cases there should be preliminary hygienic and drug treatment. Mr. Barling thought that operation to be successful must be early. Mr. Armour had had 20 cases. He now reserved simple ligature for acute cases, and looked upon it as a temporary measure. He used chloroform, and paid particular attention to light handling of the parts. He had had only one death, and that in a case operated upon against his better judgement. Mr. Deanesly said he saw a large number of goîtres, but only 1 per cent. of them could be said to have exophthalmos. Operation in the milder cases gave good results, especially when undertaken early. Mr. W. G. Spencer referred to the excellent results he had obtained in some severe cases by simple division of the isthmus. In one he had afterwards resorted to bilateral sympathectomy with success, when the symptoms recurred. Mr. Thelwall Thomas had two fatalities many years ago, and gave up operating. Recently he had, however, been driven to resume operative measures, and of 6 more recent cases, 3 were cured, and 3 were as yet not far enough distant to speak as to permanence of the improvement. Mr. Hey Groves spoke of the possibility of grafting thyroid as a supplementary operation to replace the toxic gland removed. Professor Crile of Cleveland afterwards read a paper on some of the factors that determined the results of surgical operations. His remarks were based on experimental researches into the effects of anaemia, shock, infection and fear upon the brain cells, and he demonstrated the remarkable disorganization, amounting to total destruction, of these cells that could be induced by any one of these influences if in large enough "dose." He showed, moreover, that the total "dosage" might be the sum of the several factors since the effects were cumulative. He drew the conclusion that it was essential to exclude both the physic and the physical elements of shock. The anaemic element could be completely excluded by blood transfusion. He held that the era of the triumphs of gross anatomy was passed and that the era of the victories of physiology was heralded.

Friday, July 29th, 1910.

Dr. de Martel gave a demonstration of his very ingenious trephine, which works with great rapidity and at the same time without danger to the dura mater. Mr. F. D. Bird (Melbourne) read a paper on conditions simulating cancer of the stomach. He described several instances in which syphiloma of the pylorus had been mistaken for carcinoma and gastrectomy performed. Mr. H. J. Paterson dealt with the early diagnosis of gastric cancer, emphasizing the importance of analyses of the gastric juice. Professor Alexis Thomson made a communication on the pathological anatomy of cancer of the stomach and conditions which are mistaken for it, illustrating his remarks with lantern slides of large microsections of the stomach. He stated that the condition most often mistaken was one of diffuse fibromatosis of inflammatory origin. The "leathern bottle" stomach, which had hitherto been regarded as cancerous, was in reality an example of diffuse fibromatosis. He admitted the great difficulty of diagnosis by inspection, especially in cases of ulcus carcinomatosus. In cases of doubt it was wise to open the stomach and inspect the mucosal surface. Mr. Deanesly advocated the excision of all ulcers of the stomach except those at the pylorus, even if it should be necessary to bisect the organ to accomplish the excision. He had not found gastro-enterostomy at all satisfactory in the treatment of ulceration, whether in the presence of perforation or not. Mr. E. W. Miles read a most important paper on the radical abdomino-perineal operation for cancer of the rectum. He had had 59 cases of the perineal operation, in only 4 of which there had been no recurrence. He had been driven step by step to the performance of more and more extensive operations, and now with an experience of 24 radical excisions he was at last in a position to report some satisfactory results. He had made no attempt to unite the proximal end to the anal site, but established forthwith a permanent colostomy. The paper was discussed by Mr. Drew, Mr. Mummery, and Mr. Bond. Mr. C. J. Bond described a method of establishing colostomy openings and ureteral permanent fistulae by means of elevated and more readily controlled mucous openings. The great point seemed to be that the necessary apparatus could be worn with greater security and comfort. Mr. MacLaurin (Sydney) described the clinical manifestations, diagnosis, and treatment of liver hydatid. Mr. Kennedy detailed a case of successful suture of the circumflex nerve which had been ruptured by a kick. Mr. Lockhart Mummery spoke of the operative treatment of chronic mucous and ulcerative colitis by appendicostomy. A resolution recommending the appointment by the Association of an investigation committee with reference to the best method of treating simple fractures was carried without dissent by the members of the Section.

SECTION OF TROPICAL MEDICINE.

Thursday, July 28th, 1910.

A DISCUSSION on special factors influencing the suitability of Europeans for life in the tropics was opened by Sir R. Havelock Charles, the general drift of his contention being that the heat and moisture of tropical lands caused, independently of disease, deterioration marked chiefly by anaemia. The long-continued high temperature, the great diurnal variations, and the parasitic diseases were, he said, the three special factors peculiar to the tropics which directly affect health. The physiological effect of these was excessive cutaneous action alternating with internal congestions, and the ultimate results were a slow advancing asthenia and anaemia, and a sapped constitution. Pathological changes led to deterioration of blood and degeneration due to hyperaemia, followed by loss of action in the liver and intestines; the incompetence of these viscera generated an accumulation of toxins. The best kind of man to go to the tropics was the good ordinary type of Britisher with a clear head, an even temper, not over-intellectual and introspective, but one who could take an interest in things around him, and one who could do hard work and find pleasure therein. The type of woman wanted was the healthy, not the neurotic; the worker, not the unoccupied or pleasure-loving woman. The man who was not wanted was the victim to migraine, headaches, any hereditary mental taint or epilepsy, who bore heat ill, or suffered from insomnia, or was neurotic in any way. A high degree of myopia with fundus changes was more than disadvantageous. Asthma and tuberculosis should bar a man absolutely for tropical life. Tendency to loose bowels, functional albuminuria, or diabetes were ailments deterrent to healthy life in the tropics. The following joined in the discussion: Lieutenant-Colonel H. Hendley, I.M.S., Dr. F. Charles Harford, Colonel Joubert de la Ferté, I.M.S., Lieutenant-Colonel A. M. Davies, I.M.S., Lieutenant-Colonel P. W. O'Gorman, I.M.S., Dr. J. Preston Maxwell, Dr. J. Basil Price, Dr. D. E. Anderson, Dr. L. W. Sambon, Dr. G. M. Harston, Professor Fülleborn (Hamburg), Mr. S. Bonté Elgood (Cairo), Dr. W. F. Prout, C.M.G., Dr. Andrew Balfour (Khartoum), Dr. Laurence D. Parsons (Gibraltar), Dr. St. George Gray (Southern Nigeria), Major P. Dee, I.M.S., and Dr. Sandwith (President of the Section). Sir R. Havelock Charles wound up the discussion by answering criticisms. Dr. R. Row (India) read an interesting paper on further observations on *Leishmania tropica* of Oriental sore of Cambay, India. Dr. A. Connal read a communication on the serum treatment of a horse suffering from trypanosomiasis. Dr. G. Duncan Whyte (Swatow, China) described the analysis of air within mosquito nets. He showed that in a well-ventilated room the air within the net showed practically no difference from that without the net. Dr. G. C. Low spoke on the subject.

Friday, July 29th, 1910.

On the concluding day a number of interesting papers were read. Observations on tropical bronchooidiosis was the subject of a paper by Dr. Aldo Castellani (Ceylon). Professor Fülleborn (Hamburg) gave an interesting demonstration on the development and morphology of micro-filaria by means of the epidiascope. Drs. G. C. Low, C. W. Daniels, and J. Preston Maxwell joined in the discussion on Professor Fülleborn's paper. Phlebotomus fever was described and illustrated on the screen by Lieutenant-Colonel C. Birt, R.A.M.C., from experience gained in Malta, Crete, India, Aden, and elsewhere. The sandfly, *Phlebotomus papatasii*, he showed to be the carrier of the disease. Dr. L. L. P. Phillips (Cairo) read a paper on the same disease in Egypt; Dr. Andrew Balfour (Khartoum) and Dr. R. Row (Bombay), Dr. A. C. Parsons (Northern Nigeria) and Dr. F. M. Sandwith joining in the discussion. Dr. L. L. P. Phillips read a paper on typhoid fever in Egypt, and expressed the opinion that the disease was of a milder form than that commonly seen in Europe. Recent observations on the etiology of pellagra were made by Dr. Louis W. Sambon on the basis of experiences gained in Italy. Pellagra, he said, was not contagious; it was due to a protozoal infection, and would appear to be carried by *Simulium reptans*. Dr. Lavinder, U.S.A., spoke in appreciation of Dr. Sambon's work in Italy. Dr. Andrew Balfour read a paper on the question of water supply in the tropics, as illustrated by the supply for Khartoum, while human botryomycosis was the subject of a paper by Captain Archibald, R.A.M.C., from experience gained in the same locality. Mr. F. C. Madden, Professor of Surgery at the Egyptian Government School of Medicine, Cairo, read a paper upon the incidence of bilharziosis in Egypt and its clinical manifestations. The paper was illustrated by photographs. The last paper was one on dysentery, read by Major G. H. Fink, I.M.S.

ON July 25th Dr. Alexander George Duncan, late of Calton House, Amhurst Park, who recently retired from practice after thirty years of professional work in the district, was presented with a handsomely executed illuminated address, accompanied by a purse containing a cheque for £200.

Medical Notes in Parliament.

[From our Lobby Correspondent.]

Territorial Force Ambulance.—On Thursday in last week Lord Galway called attention in the Lords to the scheme for nursing the Territorial Force and to the arrangements by which the St. John Ambulance Association granted certificates. A great work had been done by this association in teaching people to give first aid in the 300 centres in England. Some difficulties had arisen, however, and the question he specially referred to was the granting of certificates. He did not want the standard lowered. It had been suggested that lectures might be given by nurses to women candidates, but he hoped the number of such lectures would be limited, and the remaining lectures and the examination for final certificates conducted by medical men. He hoped the War Office would insist on the certificate being given by an independent medical man. A large number of medical men had given their services in teaching gratuitously, but he understood that the British Medical Association was putting pressure on medical men to charge fees for these classes. He hoped that would not be carried to any great extent, as it would render the classes practically prohibitive. He especially urged that the standard for certificates should be kept up. Lord Lucas said, in reply, that he recognized the very valuable work done by the St. John Ambulance Association, and through their work the Red Cross Society had been able to organize a considerable number of voluntary aid detachments. He could assure his noble friend that there was no intention to lower the standard of efficiency. In the first place, it was a necessary preliminary before any body could go into a voluntary aid detachment that he or she should hold a certificate. He would qualify his statement that every body who went into these detachments was required to hold a certificate, by saying that it was proposed to make one or two exceptions for the benefit of specialists, such as people who had already been in the Regular, the Special Reserve, or the Territorial Army Medical Corps—pharmacists and people of that kind; but every one who joined for general duty would be required to possess a certificate. With regard to the nature of the certificate, there was no doubt that, though good work had been done by the St. John Ambulance Association, there was a great demand that the granting of certificates should be facilitated. In a number of places there had been a general desire to raise voluntary aid detachments, but for one reason or another the people who had intended to join had not been able to get the first aid certificate. It was therefore necessary to consider the acceptance of certificates other than that of the St. John Ambulance Association. The nature of those certificates had not yet been settled, but it was not intended that the certificate should be any lower than that of the well-known standard maintained by the St. John Association. As to whether classes should be trained by nurses or medical men, that was undoubtedly a very vexed question. There were a large number of people who considered that nursing should be taught by qualified medical practitioners, and there was another large section who held the opinion that the best persons to teach nursing were nurses. They had to reconcile those warring factions, and arrive at a conclusion which, while enlisting both parties in support, would not in any way let down the standard. This matter was being considered at the present moment by the Advisory Council. After a speech from Lord Knutsford on the value of the work of the St. John Association, and the present difficulties, Lord Dartmouth pointed out the dangers likely to arise from any friction between the Red Cross Society and the St. John Association. On the question of certificates, he said he understood that these certificates would be given by independent medical men. That the St. John Association was very anxious to insist upon, and also that there should be no lowering of the present standard. The noble viscount who initiated this discussion raised the question of instruction by nurses. To the ordinary mind instruction in home nursing given by a certified nurse was a very natural and desirable thing; but the great difficulty in introducing the question of home nursing lay in the fact that the British Medical Association would have nothing to do with it. That Association was a very powerful body, and if that point was lost sight of they might again find themselves in considerable difficulty with those medical men who were in the British Medical Association. He believed a great number of the most responsible medical men belonged to that union, and it was quite possible, unless they were very careful in this matter, that they might find themselves in the difficulty of not having the necessary medical men to give the instruction and the help required. While they had up to now in many cases been able to depend on the generous assistance of the medical profession in giving instruction free, he understood that in certain parts of the country medical men had been instructed that they must be paid for the work they did. That, of course, would add very largely to the expenditure. He referred to these points because if they were to have a satisfactory solution they would have to be carefully considered. The matter then dropped.

Army Hospital Accommodation.—Lord Dartmouth raised in the House of Lords last week the question of proper hospital accommodation at Lichfield. It was a large garrison and there were connected with it 242 women and 509 children for whom no sort of hospital accommodation was provided or any provision of nurses. Lord Lucas said he had not had time to inquire into this particular case, but he could state the general policy. In certain of the larger garrisons they did maintain military hospitals. They also maintained them for some of the smaller garrisons if a civil hospital was nowhere within reach. They did not, however, maintain hospitals in what might be considered the smaller garrison towns. But where they had these military hospitals, if there were more than 100 beds for soldiers they also maintained a certain number of beds and cots for women and children. They did not, however, recognize any actual responsibility with regard to that. In Lichfield they had not got a military hospital, and he was afraid they did not propose to maintain anything there in the nature of a hospital for women and children. They quite recognized and were grateful for the work done by the organization which maintained a nurse there. These women and children when they required special treatment could be admitted to the civil hospital, and if they did not require that they received medical attendance in their own quarters. That was the general rule with regard to places such as Lichfield, and he was afraid it would be useless to hold out any hope of being able to modify that. He would, however, inquire.

The Indian Budget.—Last week the statement of the Under Secretary on the Indian Budget excited much interest on account of the political position in the great dependency. After an exhaustive statement as regards the general prosperity of agriculture and trade, he turned to medical matters—plague and malaria. The former, he said, continued to puzzle and disappoint the medical and sanitary authorities. His predecessor last year was able to describe its decreasing virulence during the last two years, 1908 and 1909, as encouraging. It was hoped that the worst had been seen of the disease in 1906, as in that year the mortality from it dropped from over a million to 357,000. In 1907 this hope was falsified, as the mortality rose to upwards of 1,300,000. In 1908 the disease seemed again to be a spent force, as the deaths were limited to 156,000. It continued quiescent through 1909 with a mortality of 175,000. This year it had flared up once more, and from January to the end of June 374,000 deaths had been registered. As in former years, the disease this year had been most severely felt in the United Provinces and the Punjab. It was a local disease in the sense that it not only recurred in particular provinces, but in particular districts in these provinces. All investigations tended to prove that it was unconnected with local peculiarities of soil or drainage, or with the comparative wealth or poverty of the inhabitants. Science had helped in removing the mystery which once enveloped it, and in indicating measures by which it could be abated. The extermination of rats and fleas and the prevention of their importation from infected to healthy places were now

generally recognized as essential. Inoculation and the temporary evacuation of infected houses had proved valuable subsidiary measures. Knowledge on these points was spreading, and the general population showed an increasing willingness to co operate with the Administration in complying with the proper measures on the occasion of outbreaks. As the total mortality from all causes in British India, with its population of 226,000,000, exceeded 8,000,000 a year, the contribution which plague made to this death roll was, in most years, relatively small. The effect of malaria on the population at large was more serious than plague. Registration of causes of death was, in India, exceedingly imperfect, and the heading "Fevers" included a great deal besides death from malarial fevers proper, but in years when malaria was active the fever death-rate unmistakably revealed the fact. In 1908, when malaria of a very severe type affected the population of Upper India, the number of deaths registered under the generic title of "Fevers in British India" was 5,424,000, against about 4,500,000 in each of the two preceding years. This increase of over 900,000 deaths represented the ravages of malaria. The causes which brought about epidemics were obscure. They seemed to be connected with excessive rainfalls, which, by flooding the country with water, made it a vast breeding ground for the infecting mosquito. The Government of India was fully alive to the bearing of this lamentable mortality on the social condition of the people and the economic development of the country. In October, 1909, a conference convened at Simla by the Viceroy examined the subject most carefully, and submitted a programme of remedial measures, which it was hoped would not be without result. In the town sites improvements could be made which would keep down the mosquito. In the country the main defence must be prophylactic treatment by quinine. The Indian Government in the past had secured for the people by means of plantations and factories a large and cheap supply of quinine. The supply was now being largely increased and cheapened and more effectively distributed. By special grants in aid, and by improving the finances of municipalities and district boards, the Government of India had enabled the local sanitary authorities to make larger provision than in the past for drainage and site improvements. After some remarks on the opium revenue from Mr. Taylor and Mr. Lloyd, the rest of the debate was devoted to the purely political question of restrictive legislation.

Births and Deaths (Scotland).—Mr. Dundas White asked the Lord Advocate if he could say what had been the natural increase of the population of Scotland by the excess of births over deaths during the first six months of the present year. Mr. Ure answered that the births registered in Scotland during the period referred to numbered 64,233, deaths registered numbered 39,194, and thus the excess of births registered over deaths registered was 25,039.

Immature Meat Prohibition Bill.—Mr. Cathcart Wason introduced this bill last week to prevent the consumption of immature meat derived from the slaughter of calves immediately after birth. He said doctors did not quite agree as to whether this food was necessarily unwholesome. The veal consumed by the well-to-do was probably some four or five weeks old, but it was obviously improper that the poor should have this immature meat, slaughtered immediately after birth, sold to them. The bill was backed by Dr. Addison, Sir John Barlow, Mr. Falconer, Mr. Glover, Mr. Greenwood, Mr. Arthur Lee, Mr. Lonsdale, Mr. Walter Long, Mr. J. McVeagh, Mr. Munro Ferguson, and Mr. Wilkie. The second reading was put down for November 22nd.

Water Supplies (Protection) Bill.—Mr. J. G. Butcher asked the Prime Minister whether his attention had been called to the recent Report from the Select Committee on the Water Supplies (Protection) Bill; and whether, in view of the grave difficulties arising in connexion with the abstraction of underground water by water authorities and others, and of the demand for an alteration in the law as regards compensation for injury caused by such abstraction, he would favourably consider the recommendation of the Select Committee to the effect that a comprehensive inquiry into the whole subject of surface and underground water supplies should be held. The Prime Minister replied that he understood that prior to the appointment of the Joint Select Committee, his right hon. friend the President of the Local Government Board had decided to introduce a bill to give effect to the recommendations of the Royal Commission on Sewage Disposal endorsed recently by the Joint Select Committee. The recommendations of the Select Committee would be carefully considered by the Government in connexion with the bill in question.

American Meat (Importation).—Mr. Hunt, in a long question last week, quoted figures showing that a large number of carcasses of diseased cattle and pigs were imported into this country from America, and Mr. Burns said that the figures which the hon. member gave appeared to be taken from the Annual Reports of the United States Bureau of Animal Industry, but he had no means of verifying them. Under the Public Health (Unsound Food) Regulations, 1908, the medical officer of health was empowered to seize any article of food which was unsound, unwholesome, or unfit for human consumption. That officer had similar power in regard to home-killed meat. Mr. Hunt then pointed out that they were allowed to stamp some of those carcasses in America, and Mr. Burns answered that, whatever the American might do or stamp, no meat that answered to the description given by the hon. member was allowed to be landed in this country under the Act of 1908. Asked how the experts could tell if the diseased parts were cut out, Mr. Burns said that in many cases they could, and he was now taking steps to prevent any possibility of what the hon. member suggested occurring at all.

American Lard.—In reply to questions by Mr. Hunt respecting lard made from diseased swine, Mr. Burns said that the average quantity of American lard imported into this country every year would appear, from the Board of Trade Returns, to be more nearly 200,000,000 lb. than 2,000,000,000 lb. The fat extracted from carcasses condemned by the inspectors of the Department of Agriculture at United States packing houses was required by official regulations to be placed in specially marked containers, bearing the word "Inedible," before shipment. Under the Public Health (Unsound Food) Regulations, 1908, action had been taken by the Board and by British port sanitary authorities to prevent this material, when imported, from being used by lard refiners or for other food purposes.

Diseased Meat for Ship Stores.—Mr. Buxton stated last week that the Board of Trade had no power to inspect at United States ports meat supplied to British ships, but seamen had, under Section 198 of the Merchant Shipping Act, 1894, the right to complain if the provisions were unsatisfactory, and an inquiry was then held. Under Section 206 of the Merchant Shipping Act, 1894, the provisions intended for the use of the crew of any ship going from the United Kingdom through the Suez Canal or round the Cape of Good Hope or Cape Horn must be inspected by officers appointed by the Board of Trade. Under Section 26 of the Merchant Shipping Act of 1906 this inspection might be extended to any ship going from any port in the United Kingdom. If the inspector found the provisions deficient in quality, the ship could be detained until the defects were remedied to his satisfaction. Mr. Hunt then asked if there was no protection against diseased meat being put on board at American ports, and Mr. Tennant replied that the United States Government was perfectly able to protect its seamen from diseased meat. If there was any objection, an inquiry could be held.

Borax and Preservation of Meat.—Mr. Burns stated last week, in reference to the use of borax as a preservative, that in pursuance of the Public Health (Foreign Meat)

Regulations, 1908, certain meats such as tongue, tripe, and kidneys, which were formerly imported in pickle containing large quantities of borax, had ceased to be imported, and he did not at present think it necessary to take any further steps in the matter. He also said that any rules allowing borax to be used in America were dealt with under the regulations of the Food Act passed in 1907.

Dirty Bedding.—In reply to Lord Alexander Thynne, who asked for a bill to prevent dirty flock and loathsome material being used for bedding, Mr. Burns said he hoped it might be possible to introduce a bill dealing with this subject at an early date.

Anthrax (Outbreaks in Russia, India, and Egypt).—Mr. Stanier asked whether the President of the Board of Agriculture would ask the Foreign and Colonial Offices to procure reports on the history and outbreaks of anthrax in Russia, India, and Egypt, and inquire whether there was anything exported from those countries to this country that might carry the disease. Sir E. Strachey replied that investigations as to the possibility of the introduction of anthrax into this country by means of materials imported from abroad had been carried on by the veterinary officers of the Board in their laboratory for the last three years. Some information as to the position in the particular countries named was already available, and steps were being taken to supplement it as far as possible. The Board did not think that they needed to ask for the assistance of either the Foreign or Colonial Offices in the matter.

Boarded-out Children.—On the point of the regular visitation of boarded-out children by women visitors, Mr. Burns said last week that in connexion with any new Boarding out within Unions Order he should be happy to consider whether the provisions of the existing Order as regards the visitation of children required strengthening in any respect.

Malta Fever.—Mr. Chancellor asked the Under Secretary of State for the Colonies if the elected members of the Council of Government in Malta who had declined to concur in the appointment of a committee to consider further the origin of Malta fever, unless the inquiry was limited to the manner in which goats were infected, were paid officials who were largely responsible for the goat's milk theory; and whether he was aware that those members who were popularly elected were almost, if not quite, unanimous in their opposition to that theory. Colonel Seely answered that the elected members, with the exception of two who received remuneration as members of the Executive Council, were not paid by the Government; and their attitude on the question was as stated in the answer made on July 21st.

Invalidity Insurance.—Mr. Hicks Beach asked the Chancellor of the Exchequer whether he had communicated with friendly societies working under the Holloway principles in reference to his proposed scheme of invalidity insurance; and, if he had not yet done so, whether he would obtain the views of these societies on his proposals before the final form was decided upon by the Government. Mr. Lloyd George said that the answer to the first part of the question was in the negative. He could assure the hon. member that ample opportunity would be given to all persons interested to make representations to the Government before their proposals were definitely formulated.

The Adjournment of Parliament.—On Friday, July 29th, the House of Commons met at 12 o'clock, and after some discussion and two divisions the Declaration Bill was passed. A number of small bills were also given a third reading, and then the adjournment was moved till Wednesday, August 3rd, when the House of Commons finished its business and adjourned till Tuesday, November 15th.

EPSOM COLLEGE.

Mr. H. J. Mackinder, M.P., presented the more important prizes at his old school on Wednesday, July 27th, when there was a very large gathering of friends of the college. The weather was threatening early in the morning, but it proved to be fine throughout the day, thus enabling the visitors to inspect the numerous additions to the buildings which have been carried out during the past few years at a cost of close upon £20,000.

The Head Master gave his customary address in the big schoolroom, drawing attention to the importance of the carefully drawn up reports which are sent home in reference to the work of the boys. He emphasized the value of encouraging boys to read aloud during the holidays, and referred to the great structural improvements which the council had effected at the college in recent years, the school being now well equipped for taking 300 resident pupils. He said that at the present time there were 287 boys, which number was a record.

Mr. Mackinder referred to the great improvements which had been made at the college since he had walked up to a platform in that hall to receive a prize, and had captained the school fifteen about thirty years ago. He supported what the head master had said as to the need of reading aloud—an accomplishment that had been allowed to fall somewhat into disuse in modern days—and pointed out how useful such a practice was in helping one to understand the real meaning of a book. A person who could speak our noble language, using short, straightforward sentences, and who could look one squarely in the eye, was likely to be a manly, straightforward being. He was glad to hear the cheers that went up for the Officers' Training Corps when the head master referred to it, because there was a danger that many boys, when they left school, would forget the necessity for keeping their bodies physically fit. The temptation to spend one's life in a rush was increasing, and with the increasing power of our civilization men required poise, which they could not get unless their bodies were fit. A great deal of character came from physical fitness, which helped to make the perfect gentleman. Such a man was one who was always in possession of himself, who would not be rude when some one was rude to him, who could not be thrown off his balance, and who never forgot to be polite. Physical fitness was at the root of that perfect self-possession which in a large measure made the English gentleman. In conclusion he said that he wanted those who went through that school to win for it the proud reputation of making the old Epsomian known as a gentleman, an expert, and a citizen of whom his country was proud.

A vote of thanks to Mr. Mackinder for his speech was proposed by Sir Henry Morris, who observed that even if Mr. Mackinder had not spoken a word, but had merely appeared on the platform, he would have been a great living object-lesson to the boys, being, as he was, a man who both at school and at Oxford, and since leaving the University, had combined in a remarkable manner physical development with mental cultivation. He drew attention to Mr. Mackinder's work as Reader in Geography at the London and Oxford Universities, and as the director, for a time, of the London School of Economics and Political Science; and also to the reputation which he had made as a mountaineer and explorer. He was the first climber to reach actually to the summit of Mount Kenya, the highest mountain in British East Africa, being between 18,000 and 19,000 ft. This ascent he accomplished in 1899—not in 1889, as erroneously recorded in the Epsom College register—and his name was indelibly associated with the great East African rift valley country, as one of the valleys running west from the old volcanic pile of Mount Kenya was known as Mackinder Valley, it having been named after him.

Additions to School Buildings.

The following comprise the recent additions and improvements to the school buildings: The "Markham Skerritt" block, containing large physical and biological laboratories, with lecture-rooms, workshop, battery-room, a day boys' common-room, and four large, airy, and light class-rooms; a new large and most up to date gymnasium, with fencing gallery and Swedish exercise appliances; a new music hall for concerts and class teaching, and separate sound-proof music practice rooms; a new

armoury, with stands for 200 rifles; the extension of the shooting range to full regulation length; a new carpenter's shop, with large timber store; and a building giving additional box-room, changing-room, and lavatory accommodation. A heating installation throughout the whole of the buildings, new and old, has been provided on the "Reck" circulator system, together with a complete hot-water supply. The quadrangle has been extended, levelled, and asphalted, and a handsome covered way has been erected round the quadrangle, thus connecting the whole of the numerous buildings.

THE POOR LAW MEDICAL OFFICERS' ASSOCIATION OF ENGLAND AND WALES.

A SPECIAL general meeting of this Association was held in the Council Chamber, at 429, Strand, London, W.C., on Friday, July 29th, at 4 p.m. All Poor Law medical officers had been invited to be present, and Surgeon-General Evatt, C.B., was in the chair.

Among those present were Drs. G. Jackson (Plymouth), Drury (Halifax), C. Biddle (Merthyr Tydfil), Balding (Royston), Walter Smith (London), Carey Barlow (London), Holder (Hull). Dr. Cruickshank (President of the Association of Medical Officers of Heath) and Dr. Fremantle (M.O.H. of Herts) were also present.

MINUTES.

The Honorary Secretary read the minutes of the annual meeting at Halifax. With some slight alteration, they were confirmed, and signed by the chairman.

POOR LAW SYSTEM.

The meeting then entered upon the consideration of the following resolutions, which had been referred from the meeting at Halifax:

1. That it is not desirable that there should be a "break-up" of the present Poor Law system. That proper reform of existing institutions would be better for the welfare of the sick poor and the good of the nation.
2. That any system in which *free* medical relief is given subject to no other condition than the *subsequent* recovery of the cost from all able to pay, would be pauperizing to the nation, and ruinous to the interests of all medical practitioners in poor districts.
3. That, except in urgent cases, some *test*, such as the present medical order, should be required of *all* applicants for State medical relief.
4. That there are no logical grounds for drawing any distinction between medical and other relief when granted by the State.
5. That the medical treatment of paupers, or State patients, by provident institutions is strongly to be condemned. That what is done for the State should be paid for by the State *at an equitable rate*. That the payments accepted at provident dispensaries in order to encourage individual thrift cannot form any sound basis for State payment for the medical charge of the destitute.
6. That a system of "part time" is better for the interests of the sick poor. That it is better for the latter to be attended by the same doctors as the rest of the community, rather than by officials appointed to attend only on the poor. That a system of "part time" medical officers lessens the distance that has to be traversed by applicants for medical relief, a matter of great importance in country areas.
7. That the Poor Law Medical Service, however it may be co-ordinated with the Sanitary Medical Service, should be kept separate from the latter.

They were taken seriatim. There was a difference of opinion with regard to No. 1. Dr. Holder strongly objected to it, and others, who were in favour of the principle of the resolution, thought it inadvisable to stereotype it as the policy of the association. After considerable discussion, it was decided to withdraw altogether Resolution 1.

The same was done in the case of No. 4, although most present were in perfect agreement with the principle of the resolution, but it was thought inadvisable by some to put it forward, seeing that the franchise had been granted to the recipients of medical relief, and was not likely to be withdrawn.

With the exception of these two resolutions, all the others were almost unanimously carried, as they stand, with the alteration of "separate" into "distinct" at the end of No. 7.

VOTE OF THANKS.

The meeting separated with a vote of thanks to the Honorary Secretary for his work on behalf of the Poor Law Medical Service of England and Wales.

LOCAL GOVERNMENT BOARD FOR SCOTLAND.

THE fifteenth annual report of the Local Government Board for Scotland has just been issued.

POOR LAW.

Dealing with the Poor Law, the Board reports the number of poor in 1909 to be 113,259, being an increase of pauperism amounting to 2,054. The increase occurs mainly in the mining and manufacturing districts of the counties of Lanark, Renfrew, Dumbarton, and Stirling, and is due to continued depression in trade. Compared with 1868—the year of the highest recorded pauperism—the number of poor per 1,000 of population has fallen from 41 to 23—a decrease of 18 per 1,000 of the population.

The administration of parochial relief to pauper children by boarding them with respectable families in rural districts continues to be satisfactorily conducted, no fewer than 6,955 children being thus treated during 1909.

In connexion with the nursing of the sick poor, the Board still continue to hold two examinations—one in June and the other in December—for the certification of trained sick nurses. Thirty-six candidates sat for the June examination, and 40 for the December examination. Of these, 28 obtained the full certificate granted by the Board. The examiners state that the candidates generally showed a highly creditable acquaintance with the subjects on which they were examined, and gave evidence that they had been well and carefully taught.

PUBLIC HEALTH.

Small-pox.—Only 6 cases of this disease were reported during 1909, as against 82 in the previous year.

Cerebro-spinal Fever.—One hundred and eighty-nine cases of this disease were intimated, a decrease on the number of the previous year. The mortality continues high, 125 of these cases proving fatal.

Phthisis Pulmonalis.—Regarding the notification of this disease the Board state that 24 districts and 32 burghs have obtained their approval to the addition of phthisis to the list of notifiable diseases. The Board do not insist on the provision of hospital or sanatorium accommodation as a condition of giving approval to the extension of the Infectious Disease (Notification) Act to this disease. Several local authorities utilize small-pox hospitals or empty wards in ordinary infectious diseases hospitals for the treatment of cases.

Vaccination.—There is an increase in the number of defaulters as compared with previous years; this the Board attributes to several causes: (*a*) A general impression among the people that vaccination is no longer compulsory; this impression may be due partly to a misunderstanding of the terms of the Vaccination (Scotland) Act, 1907, and partly to the fact that for six months after the passing of the Act the issue of the usual notices were suspended to permit of declarations of conscientious objection being made and delivered to the registrar; (*b*) failure of the registrars to transmit the notices; (*c*) depression of trade; and (*d*) emigration; 2,677 tubes of glycerinated calf lymph were supplied to parochial vaccinators during 1909.

The remainder of the report contains a series of appendices which deal with the reports of the general superintendents, extracts from the annual reports of medical officers and sanitary officers dealing with any special subject which may have occured in their districts during the year, with circulars on public health matters, and vaccination. It concludes with statistical tables, abstracts, and returns.

The report is a valuable one, embracing, as it does, the work done in the various departments controlled by the Local Government Board.

HIS Majesty the King has graciously consented to become the Patron of the Royal Meteorological Society.

DR. H. F. STOKES, one of the London County Council's district medical officers, has been retained as medical adviser in connexion with claims arising out of accidents on the tramways.

FLEET SURGEON G. T. COLLINGWOOD, Royal Navy, holding office at the Royal Naval College, Osborne, has been appointed a Member of the Fourth Class of the Royal Victorian Order, dated July 24th.

British Medical Journal.

SATURDAY, AUGUST 6TH, 1910.

THE BOARD OF TRADE COMMITTEE ON COLOUR BLINDNESS.

We have received a copy of a letter written to the Assistant Secretary of the Marine Department of the Board of Trade by the Imperial Merchant Service Guild. The Guild takes exception to the composition of the Departmental Committee on colour blindness, which is constituted as follows: The Right Hon. Arthur Dyke Acland (Chairman), Lord Rayleigh, O.M., F.R.S., Sir Arthur Rücker, F.R.S., Mr. Raymond Beck, Captain Thomas Golding, Professor Francis Gotch, F.R.S., Mr. Norman Hill, Mr. Edward Nettleship, F.R.C.S., Mr. J. H. Parsons, F.R.C.S., Professor J. H. Poynting, F.R.S., and Professor E. H. Starling, M.D., F.R.S., with Dr. William Watson, F.R.S., and Mr. S. G. Tallents as Secretaries.

The Guild understood that shipping organizations were not to be represented and that the Committee was to be a small one. In consequence it took no steps to secure representation. But the Guild now finds that eleven gentlemen have been selected. Of these, one is the secretary of the second largest association of shipowners in this country, another is a distinguished underwriter, while a third is an Elder Brother of Trinity House. Yet the Guild is excluded from any representation.

The Guild further objects that the Royal Society is so largely represented. It points out that the Board of Trade's position with regard to these eyesight tests is impugned not nearly so much as is that of the Royal Society, who recommended in 1892 all the tests used to examine seamen. It feels that it is now conclusively proved that these tests, and more particularly the tests applied to candidates on appeal after failure in colour vision by Sir William Abney, are discredited and useless for their purpose. The Royal Society is on its defence, and must defend the recommendations which it laid before the Board of Trade, and which are now discredited on all hands, more particularly by the most eminent ophthalmologists who have devoted special study to colour vision.

The letter then raises the case of Mr. Trattles, who, after being rejected by Sir William Abney, was, it states, proved by practical tests to be efficient in discriminating between the coloured signals used at sea.

The argument of the letter, then, is that Sir William Abney decided that Mr. Trattles was colour blind, using tests which had been recommended by the Royal Society, and that further practical tests at sea proved that he had normal colour vision. Sir William Abney's assistant, the letter states, is acting as secretary to the committee, which consists largely of Fellows of the Royal Society. It would seem, therefore, to be implied that the committee is strongly prejudiced in favour of the methods used by Sir William Abney and recommended by the Royal Society.

The whole question of colour vision is a highly scientific subject which can only be efficiently handled by physicists, physiologists, and ophthalmic surgeons. All these experts are to be found on the committee, and in addition a distinguished seaman is present to supply technical knowledge with regard to the special circumstances under which a seaman has to recognize signals. There seems to us to be no adequate reason why the Guild should be specially represented; the matter is not a question of marine politics but of pure science. The attack upon Sir William Abney is easily met. It must be perfectly obvious to all thinking men that if any individual makes any definite mistake in the wool test, by matching colours which a normal child would not match, he must be utterly unfit to keep watch at sea. But even when these mistakes have been made, the Board allows an appeal to a higher court. At the second examination the candidate is examined with pure spectral colours colours which are perfectly obvious to a normal child. Any error should at once disqualify. The wool test is easily passed by many colour blind persons, and so the fact that an officer once passed does not show that he has normal colour perception, and when he makes a gross error it is proof that he is unfit for command. The so-called practical test, to take a suspected candidate out in a steamer at night and test him on the lights seen, is in no sense a scientific test. The intelligent officer steaming down the narrow channels of the Thames or Mersey knows perfectly that ships seen to port will show red lights, and he is helped by the fact that the masthead lights are much more brilliant than the port red lights, which in turn are brighter than the green starboard lights. Again, the white lights are high on the mast, the side lights low. The position and colour of the lightships on the Thames and Mersey are well known, and the whole examination is an easy game of guessing. It is a well known fact that there are many marine officers and engine drivers who are colour blind, and yet manage for years, it may be, not to make mistakes; but sooner or later on a misty night the error is made, and a fatal accident may occur. We ourselves should be very unhappy to be passengers in a ship navigated by officers who could not pass Sir William Abney's more recent spectroscopic tests.

There is no doubt that the Royal Society made a great error in recommending Holmgren's wools as a sole and an efficient test. They are thoroughly inefficient, and should be replaced by a lamp test.

In one respect the committee is open to grave objection. It does not include Dr. Edridge-Green, who has devoted his whole life to the special study of these problems and whose advice the Board of Trade set aside when it adopted the recommendations of the Royal Society.

THE ETIOLOGY OF GENERAL PARALYSIS.

Some years ago Ford Robertson, McRae and Jeffrey demonstrated the frequent existence of an organism resembling the Klebs-Loeffler bacillus in the respiratory and alimentary tracts of general paralytics. To this organism, which they named the *Bacillus paralyticans*, they attached etiological significance. It may be recalled also that Ford Robertson and Shennan carried out experimental investigations into the pathogenicity of this organism in animals; the inoculation of the organism, they said, producing marked inco-ordination of movement, dyspnoea and great drowsiness, and the

animals showed *post-mortem* changes in the central nervous system which had "distinct resemblances to those which occur in dementia paralytica." These results have remained unconfirmed by other workers in this field; in fact, Dr. Froude Flashman and Dr. Eyre, working in the laboratory at Claybury, found no evidence that diphtheroid organisms were more common in the throats of general paralytics than in the throats of the subjects of other forms of insanity or of sane members of the general population; whilst J. P. Candler, as the result of the examination of the respiratory, alimentary, and genito-urinary tracts of the cadaver, and of the urine, blood and cerebro-spinal fluid during life, came to the conclusion that there was no evidence to warrant the statement that any particular species of the diphtheroid groups is endowed with specific pathogenic and paralytic properties. Dr. Ford Robertson and his colleagues, however, persevered in their researches and with improved technique succeeded in finding the organism in almost all the tissues of the body. They found also that diphtheroid organisms ingested by leucocytes obtained from cases of general paralysis were more rapidly digested than were those ingested by normal leucocytes, and still later they were able to produce antiserums whose inoculation into general paralytics was followed in some cases by decided improvement.

The results obtained by Dr. Ford Robertson and his colleagues receives some support from investigations since carried out at the pathological laboratory of the New South Wales Lunacy Department by Drs. Froude Flashman and Oliver Latham.[1] After a general review of the whole matter they point out the absence of any detailed accounts or illustrations of changes resembling those met with in the brains of general paralytics in the animals treated by Ford Robertson and his colleagues. They concede that the absence of such changes from the brains of rats dying after a few weeks or months of illness could not be held to negative the theory; but at the same time maintain that the demonstration of these changes would add a strong link in the chain of evidence. This missing link they claim to have supplied. A diphtheroid organism, isolated from a case of general paralysis was grown by them and injected into a rat. The animal became paretic, feeble, lethargic, and died, and, they say, examination of the nervous system revealed "in marked degree all the changes we are accustomed to regard as typical of general paralysis." Altogether fifteen rats were either inoculated with bouillon filtrate, or with bouillon filtrate and living bacilli, or were fed on living bacilli or injected with diphtheroid toxins. Of the fifteen two escaped and the tissues of two more were lost. Of the remainder, in one the histological changes comprised overgrowth of neuroglia, peri-arteritis, numerical increase of vessels of the cerebral and cerebellar cortex, intense engorgement of the pia, and degeneration of the nerve cells. Although these changes were signally marked in only one, the tissues of nearly all the remaining animals showed something of these changes. The other organs also gave well marked evidences of toxic action, in the lungs broncho-pneumonic patches, and in the liver congestion, with increase of fibrous elements; the kidney changes included cloudy swelling of the convoluted tubules and patches of lymphocyte invasion. Drs. Flashman and Latham therefore consider the fact to be established that diphtheroid organisms administered in a suitable way over a long period can produce marked cerebral changes, the chief of which are overgrowth of neuroglia, peri-arteritis, chronic thickening of the pia arachnoid and destruction of neurones. They maintain that syphilis is the prime factor in the causation of general paralysis, but whether it alone suffices to produce the condition, or whether it requires to be aided by bacterial influences, requires, they say, further investigation.

The results of the Wassermann reaction in the cerebro-spinal fluid of general paralytics leave little room for doubt as to the prime importance of previous syphilitic infection, but the results of Drs. Flashman and Latham are of great interest and certainly seem to warrant their statement that the changes found in the brains of general paralytics are not specifically characteristic of that disease, but indicate the reaction of the brain to some chronic form of poisoning.

A very lucid description of the Wassermann method and its diagnostic value in syphilitic and parasyphilitic diseases of the nervous system was contained in Dr. Mott's admirable Morison Lectures on the pathology of syphilis of the nervous system, published in the BRITISH MEDICAL JOURNAL[2] last year. Dr. Mott pointed out the great value of this reaction in general paralysis. Drs. Froude Flashman and Graham Butler have also carried out a long series of investigations in general paralytics and non-paralytic insane which entirely confirm the results obtained by other workers in this particular. Their clinical material was composed of 61 cases diagnosed as general paralysis and 8 cases suffering from other forms of mental disorder. Of the cases diagnosed as general paralysis, the cerebro-spinal fluid in 55 gave a positive reaction; in 2 the serum, but not the cerebro-spinal fluid, gave a positive result; whilst in 4 the reaction in both serum and cerebro-spinal fluid was negative. The further history of those whose cerebro-spinal fluids gave negative results is interesting. One at the time when the report was written was still regarded as a general paralytic by clinical experts, 1 was found to be a paranoiac, 2 were considered to be cases of organic dementia, another a tabo-paretic with predominating tabetic symptoms, and the last a secondary dement. With one exception, therefore, all of the undoubted cases of general paralysis gave positive results to this reaction. With regard to the cases of non-paralytic insanity, used as controls, none gave a positive result with either serum or cerebro-spinal fluid. Such results strongly confirm the belief "no syphilis, no general paralysis," and suggest that in cases where no history of previous syphilitic infection is obtainable either the history or the diagnosis is at fault.

Among other matters of theoretical interest in this relation, the fact that a degenerative process, associated with the breaking down of nervous elements in the central nervous system, is an essential feature of general paralysis and tabes, suggested to Drs. Flashman and Butler the possibility that in other conditions, where extensive destruction of nervous tissues is taking place, similar results might be obtained. They therefore examined the serum and cerebro-spinal fluid of three cases of extensive vascular cerebral lesion, but with entirely negative results. No evidence whatever was obtained of the specific "complement deviation," and the total albuminous content, as shown by precipitation with

[1] Reports from the Pathological Laboratory of the Lunacy Department, New South Wales Government. Vol. ii, Part I. 1910. W. A. Gullick, Government Printer, Sydney. (Pp. 111. Price 4s. 6d.)

[2] Vol. i, pp. 443, 521.

salicyl-sulphonic acid, was the same as in normal cerebro-spinal fluid. It should be remarked that at the outset of their investigations Drs. Flashman and Butler had satisfied themselves that there was a marked difference between the albuminous content of general paralytic and normal fluids. Thus, in 16 cases of general paralysis, each giving a positive Wassermann reaction, the amount of albumen precipitated ranged from 0.01 c.cm. to 0.045 c.cm.; whereas in 2 other cases—one of paranoia and the other of delusional mania—the amount of albumen precipitated was 0.007 c.cm.

In their general discussion of the relation of general paralysis to syphilis the authors point out that it is generally accepted that this is an extremely remote one, and due not to the direct action of the spirochaete but to certain degenerative processes brought about by profound alteration in the metabolism of the body as the result of previous syphilitic infection. On the other hand, they are inclined to find an explanation of the relationship between syphilis and parasyphilitic diseases in the theory, suggested by Mott and others, of latent spirochaete infection. "It certainly seems possible," they say, "that in an apparently cured or recovered case of syphilis an attenuated infection, or a focus, encapsuled, or otherwise rendered temporarily incapable of producing toxic results, and possibly incapable likewise of producing demonstrable 'antibody' formation (meaning thereby the bodies which produce the specific complement deviation of the Wassermann reaction), may exist in the body, capable under special circumstances of being roused into activity, and of giving rise to tissue change, local or general, slight or extensive, with the accompaniment of the formation of deviating bodies. . . . The disappearance, under treatment and otherwise, of the Wassermann reaction, and the latency and recrudescence of syphilis in its various forms, may thereby be explained." In any case, they are persuaded that the bodies in the fluids which bring about the specific reaction are not fortuitously produced by the tissues as a remote result of the presence of spirochaetes, but that they are, and will ultimately be shown to be, due "in the most direct manner to the action of the infective agent, and to be, therefore, antibodies produced by the spirochaete antigen."

THE ANNUAL MEETING.

GENERAL NOTES.

The great event of the year is now a thing of the past, so far as the greater number of members of the Association are actively concerned. That the meeting was highly successful there is no doubt whatever. There were, of course, points in which matters might conceivably have been improved, but it would be a curious kind of meeting of which the same could not be said, and considering the vastness of the scale of the whole of the arrangements on this occasion the openings left for reasonable criticism were remarkably few. Up to the time at which we went to press last week, nothing of material importance in this direction had come under notice, and the same is true at the present moment. Even if the facts were otherwise the debt of the Association in general to the hosts on this occasion, the Metropolitan Counties Branch, and to its executive and administrative officials, would still be a great one. Only those who have ever essayed the task can fully realize the amount of work entailed by the preparations for an annual meeting and the extent of the exertions undergone by those responsible during the week of the meeting for the actual working of the machinery laid down. In any case the Branch can congratulate itself on having been well served by all who represented it, from the President of the Association whom it is proud to possess as a member in the person of Mr. Butlin, right through the list of chairmen, secretaries, and members of committees, not forgetting, of course, the General Treasurer, Mr. Betham Robinson. On the great services rendered by the Honorary General Secretaries, Dr. Lauriston Shaw, Dr. E. W. Goodall, and Dr. W. Griffith, all are agreed. The whole success of a meeting turns on the ability, energy, and tact of the general secretaries, and the Branch, in making the appointments, could not have exercised its choice more happily. On the foregoing point we had something to say last week, and in the same issue we were happy to be able to supply members of the Association, whether present at the meeting or otherwise, with an account of everything which had happened up to the penultimate day of the meeting, including a complete report of the long debates carried on at the numerous sessions of the Representative Body, summaries of the first day's occurrences in the twenty-one Sections, and descriptions of the principal social events of a very busy week and of all the elaborate arrangements made. There are still several matters of this kind to which attention must be drawn, but it would scarcely be desirable to give a detailed account of each of them. The arrangements for the social side of the meeting were of so lavish a kind that anything more than an outlined sketch of events would occupy far more space than could well be spared for the purpose in a journal whose primary object is scientific.

HERALDRY.

Our half-fear that some heraldically hypercritical person might favour us with his views on the Presidential badge presented last week to the Association by the Metropolitan Counties Branch has so far not been realized. We are glad, therefore, to assume that the badge is as little open to exception in point of heraldry as it is attractive in respect of execution and design. On the other hand, fault has been found with our description of the outer line of the decorative frame by which the plaque bearing the figure of Hygeia is surrounded. We are told that the shamrock of Ireland appears on the left side, not on the right; but we take it that, after all, this depends on the point of view from which the badge is regarded. From that of the observer the shamrock is certainly on the right side; but from that of the wearer—which is, perhaps, the more important—it is on the left. We are judging, of course, from the coloured engraving of the badge provided by the excellent guide to London handed to each member of the Association so soon as he registered his name, and which was described in last week's issue. A further criticism is in respect of the position we assigned to the thistle of Scotland and the leek of Wales. In the light of the remarks made by our well-informed critic, we are fain to believe that we exhibited somewhat less discrimination in the matter than might either a donkey on the one hand, or a French cook on the other, and that it is, in fact, the leek, not the thistle, which figures at the lower extremity of the frame. The thistle is on the right as the badge is worn. We make this confession with the humblest apologies to all those who deem the mistake one of importance, and trust that no Scotsman or Welshman will consider the confusion a national insult. We are fully aware that the thistle is the rightly cherished emblem of Scotland, and the leek that of Wales, and honour them both equally. Our failure, in short, to distinguish the one from the

other was due neither to heraldic nor horticultural ignorance, but to the somewhat minute size of the picture before us. It should further be noted that in the report of Dr. Ford Anderson's speech in presenting the badge, which was published in the Supplement last week, the word "plurally" crept in before "emblematic." In view of the manifold symbolism of the badge this might perhaps be called *felix culpa;* but of course the word actually used by the speaker was "florally." Finally it may be added that the gift made to Mr. Butlin of a replica of the badge was a personal offering to him by the Branch, and that it is not intended to impose the payment of similar honour to each successive President on the Branch from which he happens to be drawn.

The Ladies' Dinner.

It has been a laudable custom for many years past to provide some special amusement for ladies during the holding of the Annual Dinner, and this year saw a new departure in this direction. It was one which is possibly a sign of the times, for the entertainment provided was on all-fours with that which had led to a temporary separation of the ladies from their partners. In other words, they were invited to a dinner at the Hotel Cecil. It was a singularly well-managed affair, and brought together between 300 and 400 ladies, few of whom, it may safely be asserted, had ever before found themselves seated amid such numbers at a meal in an Adamless Eden. Indeed, the sole guest representative of the inferior sex was one of a class which on such occasions plays an important but quite unrecognized part—to wit, a newspaper reporter. He was alone in his glory, not because he was the only representative of a newspaper present, but because all other papers had risen to the greatness of the occasion, and sent lady members of their staff to bring them a report of the proceedings. The ladies who had the making of the arrangements in their hands, Mrs. Butlin, Mrs. Scharlieb, and Mrs. Willey, by a very happy thought appointed a large number of stewards, each of whom was in charge of the ladies whose seats were to be near her, and took care to make their acquaintance. It was, doubtless, a conception born of much experience of feminine gatherings, and contributed materially to the success of the evening. The chair was occupied by the Chairman of the Ladies' Reception Council (Lady Aberdeen), whose health was in due course proposed by Mrs. Butlin. In performing her pleasant task Mrs. Butlin paid a just tribute to Lady Aberdeen's work for, and with, women. Her exertions on behalf of her sex, she said, were known to many, but it was not so well known, perhaps, that she had worked with the medical profession for the prevention of disease. All present would be glad to know that her contributions to the progress of the campaign against tuberculosis had been appreciated abroad as well as at home, and that next October she was to receive a gold medal from a French society interested in the same work. In acknowledging the toast Lady Aberdeen said that she believed the world was at length beginning to realize how much it was indebted to the medical profession, but she wondered if it realized equally how much it owed to wives and daughters who, in their efforts to help their male relatives in their work of serving humanity, had often to sacrifice so much. On the conclusion of the dinner, nearly all present moved on to the Lyceum Club, which provided not only an entertainment but carriages to bring its guests. Its rooms were thronged to a very late hour, those present being provided with an opportunity of forecasting the outcome of the present suffrage contest by listening to a play by Miss Cicely Hamilton and Mr. Christopher St. John, entitled "How the Vote was Won." The string quartette band of this stronghold of feminine brains was also to the fore, and discoursed most excellent music. As might have been expected, this evening made it clear that women have nothing to learn from men on the subject of entertaining, even when the lines followed are of a somewhat novel order.

At the Guildhall.

There are those who hold that by way of making visitors to the Annual Meeting rapidly known to one another personally a dance should find an early place in the list of relaxations. It is a point of view for which there is much to be said, and this year was very nearly met by the party given by the Corporation of the City of London on Wednesday. It was a *conversazione* on a very large scale, and in every way in keeping with the reputation of the City of London in respect of the munificence of its hospitality. The guests were received by Sir John Knill and the Lady Mayoress, supported by Sir Thomas Crosby and the Sheriffs and their ladies, in the great vaulted hall famous for centuries as the common meeting place of all freemen of the City of London, as the habitual residence of the City's tutelary genii, Gog and Magog, and as the scene of the innumerable dinners given in celebration of each Lord Mayor's attainment of office and in honour of Royal and other notable representatives of all nations. The guests found that a multiplicity of pastimes had been provided for their amusement. Two bands, that of the Royal Artillery and that of the Coldstream Guards, were in attendance, as well as Lawler's Ladies Orchestra. Besides this a further aural feast was provided by past and present students of the Guildhall School of Music. Nor were there lacking feasts of a more tangible but not less artistic kind. In other words, the needs of the inner man were very amply met, refreshments being served in the crypt under the new Council Chamber, in the ancient crypt adjoining the museum, and in the library reading room; while two of the committee rooms were prepared for the use of smokers. In addition, a selection of the City's treasures in the shape of books, charters, and other manuscripts, had been laid out for examination, and in the Art Gallery there were many examples of the work of old and modern masters to be seen. As for dancing, this commenced quite early in the evening in the Library, which had been provided for the occasion with a special and very excellent floor. Medical men being nothing if not investigators, it was natural that the quality of the floor should rapidly be put to the test, and in a very short time numbers of academic gowns were to be seen floating over its surface and vieing with the tone of the ladies' frocks. The change of scene from that in which the wearers of most of those robes had been engaged in the morning was indeed remarkable. The rapid success of this dance, if news of it spread in London, might possibly lead next season to despairing hostesses of lazy dancers insisting on the wearing of university costume in place of the black coat of ordinary male humanity. For the rest, we observed with interest that a melody of American origin familiarly known as "Yip-i-addy-i-ay" seemed to exercise much the same fascination on ears attuned to scientific phraseology as it has for long past on the frivolous-minded of all nationalities. Possibly a desire that no wallflowers should find place amid the other floral decorations counted for something, but on the whole we are disposed to conclude that while the charms of music are sedative to the savage breast, their effect on the medically learned are mainly stimulant. In this case the failure of a certain number to exhibit co-ordinated movement of an otherwise choreic order must have

been due to inability to find a partner rather than to any preference for engaging in scientific discussion of the true significance of names such as "Mandy on the Mash," "Tesoro Mio," "Lucky Duck," and "Yankee Grit." For this very pleasant evening members are partly indebted to Sir Thomas Crosby, who is an ex-sheriff of the City of London, and despite his active practice of medicine still contrives to find time to play a very influential part in its affairs.

AT RANELAGH AND SOUTH KENSINGTON.

BOTH the entertainments at which the President, Dr. Lauriston Shaw, and the members of the Metropolitan Counties Branch were the direct hosts were an entire success, a fact on which those who mainly organized them, Professor H. R. Spencer and Dr. R. E. Crosse, may rightly plume themselves. The evening event, a *conversazione*, was held in the Natural History Museum, South Kensington, and brought together an assembly of well over three thousand persons. It need scarcely be said that the evening was a pleasant one, nor yet that it offered the studiously minded an admirable opportunity of testing how far they had really absorbed the information on the subject of academic costumes which we laid before them in the JOURNAL issued in the week immediately preceding the meeting. This *conversazione*, taking place as it did on the night of the very last day of the meeting, also furnished occasion for exchange of experiences among members, for the healing of any differences arising in the course of the scientific discussions, and for expressions of goodwill between comparatively new acquaintances; it gave every one, too, a valued chance of meeting old friends who had elsewhere been missed, and for making arrangements for further meetings in the early future or on a similar occasion next year. An entertainment of this semi-informal character is a very desirable feature of all meetings, for it fulfils a considerably more useful purpose than that of merely passing an evening in an agreeable fashion; even the nods and smiles interchanged and the passing snatches of conversations all help to promote that feeling of goodwill and recognition of common interests in which the true strength of the British Medical Association lies. The other entertainment took place on Thursday afternoon at Ranelagh, and was a magnificent exemplar of those habitually held at this the resort of fashionable London, the sole one of its kind which still retains its ancient renown. As usual, the principal entertainment apart from conversation, listening to a band, the sampling of refreshments, and the examination of frocks and head gear, was watching a polo match, the games being played on this occasion by Ranelagh *v.* Storks. The general character of the afternoon will, however, best be summed up by quoting what must certainly be regarded as the real *bon mot* of the whole meeting. "These British Medical people," said a very portly member of the menial staff of the Ranelagh Club House, "are really quite decent"!

AT ST. ALBANS.

ONE of the most successful events of the week was the expedition on Friday afternoon to St. Albans. Those who took part in it were the guests of Dr. Eustace Lipscomb, late President of the South Midland Branch of the Association, and present Mayor of St. Albans. They left town from St. Pancras Station in three saloon carriages soon after mid-day, and on their arrival were driven in brakes to the Town Hall. There they were welcomed by Dr. Lipscomb, and then sat down to luncheon forthwith. On its conclusion there was a pleasant interchange of toasts between guests and host, and then, after a short interval for coffee and cigarettes, the party proceeded to the abbey, which, as the Dean himself acted as cicerone, they examined in very advantageous circumstances. He explained in very interesting fashion the history of the fabric, the important part which it had played in the history of Christianity in these islands, and the fashion in which its hidden beauties had been and still were being slowly revealed. Later on a visit was paid to the old site of Verulam (from which Francis Bacon took one of his titles), about a mile distant, where the very ancient edifice which marks it was explored. Finally a return was made to St. Albans, where Mrs. Lipscomb was "at home," tea being served in a charmingly old-time garden to the strains of an excellent band. It was not until after seven o'clock that the party re-arrived in London, but for most of its members the seven hours had passed with amazing rapidity. Still, after all, this is not so remarkable, for there could not be found any pleasanter fashion of exploring the varied treasures of a town which if situated at a greater distance from London would be much more familiar to most people than is actually the case. The general ignorance regarding St. Albans was neatly brought out by the Dean, who could not extract a single correct answer to his non-coupon competition on the subject of what is the highest placed building of the cathedral order in England. It appears that St. Albans Abbey lies at an elevation of over 300 ft., and is thus higher than either Lichfield, Durham, or Lincoln; the highest site of all we understand to be that occupied by the new Pro-Cathedral of Birmingham, though it only exceeds that of St. Albans by a very few feet.

VARIOUS ENTERTAINMENTS.

OF the annual dinner on Thursday night, July 28th—a Brobdingnagian affair in the way of dinner parties, attended by over 700 members—it is hardly necessary to speak, since a full account of the doings thereat will be found in the SUPPLEMENT to this issue. To many, however, the name of the place at which it was held is likely to be unfamiliar, so it may here be noted that "Connaught Rooms" is the new designation of one of the few remaining representatives of the famous London taverns of the past. The rooms are situated in Great Queen Street, a thoroughfare not yet unhappily improved out of all recognition by students of London history, and were formerly known as the "Freemason's Tavern." To many of the hospitalities offered to members it is impossible to allude, even by name. The doors of every institution, directly and indirectly connected with medicine, if not positively thrown open, were all upon the latch, and, thanks to Dr. Craig, many private clubs admitted the medical visitors to temporary membership. Private hospitality in the way of providing house room for the week, organized by the same official of the Branch, was equally widespread, and there were various private entertainments, such as the supper party given on Saturday at the Savage Club to members of the Dermatological Section and others by its President, Dr. Phineas Abraham, and sundry hospitable efforts, to which allusion was made last week. There were also the daily visits and receptions at the hospitals, the medical schools and places such as the Sesame Training Home, the Passmore Edwards Settlement, and the Royal Sanitary Institute. A mere list of the manufacturing and other premises whose managers kindly made arrangements for their examination by visitors, would alone occupy considerable space, and it can only be said that the exceptional opportunities thus offered were greatly appreciated. Included in

the list of possible visits was one to the offices of our contemporary the *Daily Telegraph*, at an hour when everything was in full swing. The opportunity was not lost by any who could secure tickets, and the proprietors took care that no one should leave unrefreshed bodily, as well as provided with at least a misty idea of the operations which daily result in the appearance of what is perhaps the most enterprising of all the great dailies. Some further reference to these and all other connected matters, including the exploration of Johnsonian haunts, which Dr. Withers Green kindly repeated on Friday, will be found in our issue of July 30th. Mention was likewise then made of the excellence of the arrangements for the reception of ladies—in the working of which Miss Boileau, M.D., played a most useful but fatiguing part—and for their amusement during Section meeting hours. For the latter Mrs. Rose Bradford and Mrs. Dudley Buxton were responsible. Indeed, the whole of the arrangements were carefully thought out, and there must have been very many active unseen workers. For that reason we are all the more sorry to be unable to do more than refer cursorily to the few busy organizers of social functions across whose path we happened to pass.

PALAEOGENESIS.

SIR JONATHAN HUTCHINSON performed an excellent service to members by providing in an annexe of the Medical Museum a very large series of paintings and other pictures illustrative of the doctrine of palaeogenesis, of which he is the chief exponent. So far as we understand the theory in question it is to the effect that there exists an ancient type-pattern of skin, and that though the variety of patterns to be found among animals is now infinite it is possible, with sufficient patience, to trace out certain points which ally all patterns so closely to one another as to justify a belief in their common origin. Additional interest is lent to this study by the fact that those conversant with it are able to trace in various skin diseases a relation between their naked-eye phenomena and the original type-pattern. The illustrations provided by Sir Jonathan Hutchinson included (*a*) ten frames containing drawings of pigmentary syphilis collected from the published works of Fournier, Chotzen, Neumann, and Kaposi; (*b*) eight frames containing pictures of acanthosis nigricans illustrating cases published by Radcliffe Crocker, Kaposi, Pollitzer, and others; (*c*) seven frames containing collected illustrations of Addison's disease; (*d*) three frames containing collected illustrations of xanthelasma of the eyelids; (*e*) an original drawing showing white eyelids with symmetrical patches after destructive inflammation of the eyes; (*f*) four frames containing illustrations of melanotic lentigo of the lips and mouth; and (*g*) as many as thirty-five frames covering a series of illustrations of colour patterns in various animals and proving the close resemblances in this respect to be found in very different species. Since there are probably few members who found sufficient leisure during the course of the meeting to examine this exhibit thoroughly, we mention that there was obtainable an excellent excursus on the general theory of palaeogenesis, accompanied by some very clever illustrations, and that copies can probably be obtained by those interested on application to Sir Jonathan Hutchinson. It may also conveniently be mentioned here that in the SUPPLEMENT to this week's issue will be found as full a description as we are able to supply of the remarkable Medical Museum, for the existence of which members were indebted to Mr. H. W. Armit, the Secretary of the Medical Museum Committee. For many of the descriptions of different sections we have to thank the honorary curators in charge of them. To the permanently valuable character of the catalogue issued in connexion with the Museum allusion was made last week. Copies are still obtainable, it is believed.

THE POLICE SURGEONS' ASSOCIATION.

AMONG the many bodies which took advantage of the presence in London of such a large number of medical men was the Police Surgeons' Association which was granted the use of the Council Chamber at 429, Strand, on Friday, and met for its annual meeting, under the presidency of Mr. Nelson Hardy. The report put in stated that it had hitherto still proved impossible to secure for medical witnesses adequate remuneration for their services. It was hoped, however, that by the concerted action of police surgeons at the next general election a future Government would be induced to reconsider the whole question of increased remuneration. For this purpose members were asked to interest their prospective parliamentary representatives and obtain their support and opinion by sending them cards of inquiry immediately before the next election. The question of the provision of ambulances for the metropolis was brought up by Mr. Nelson Hardy, who moved: "That the United Kingdom Police Surgeons' Association desires to draw the attention of the Home Secretary to the inadequate provision of ambulances in the public service within the metropolitan district of London." It was explained that the present position was that the London County Council had promoted a bill to enable itself to provide ambulances, but it had not put those powers in force and apparently did not intend to do so; while past Home Secretaries, under whose control were the Metropolitan Police, had considered the matter would be too expensive. It was to be hoped, however, that Mr. Winston Churchill would take a different view of the matter if he were approached. The resolution was seconded by Mr. Morison and carried unanimously. Mr. William Powell, of Cheltenham, was elected President for the year, and the name of Mr. Nelson Hardy was added to the list of vice-presidents. Mr. H. Powell, of Cheltenham, was elected Joint Honorary Secretary with Mr. W. H. Whitehouse in place of the new President. The Council was re-elected with the addition of Mr. Wolverson, of Wolverhampton, in place of Mr. H. W. Roberts, of London.

THE ANGLO-AMERICAN MEDICAL SOCIETY.

ANOTHER semi-official event of the Annual Meeting in this, as in several previous years, was a luncheon party given by the Continental Anglo-American Medical Society, which has its head quarters in Paris, and includes in its membership nearly all English-speaking medical men established in any part of Europe. The luncheon party took place on Thursday, Professor StClair Thomson presiding over an assembly of over a hundred. The guests included Sir James Dewar, Sir Thomas Barlow, Dr. Lucas-Championnière, Professor Achard, Dr. Luc, and Dr. Dominici of Paris, Sir Clifford Allbutt, Sir James Reid, Sir William Whitla, Professor Saundby, Mr. Sinclair White, Dr. Edwin Rayner, Sir Malcolm Morris, Dr. Goodhart, Mr. Arbuthnot Lane, Mr. Mayo Robson, Dr. Ewart, Sir James Sawyer, Mr. Ballance, Mr. Bland-Sutton, Dr. Bryan of Washington, Dr. Birkett of Montreal, and many other distinguished members of the profession at home and abroad. Sir Thomas Barlow proposed "Success to the Society," which, striving as it did to bring together British and American

practitioners of professional repute, well deserved every encouragement from colleagues at home. He felt sure that its members would do all in their power to maintain abroad the high standard and honourable traditions of British and American medicine. Professor StClair Thomson, in a speech lightened by humour, explained the usefulness of the society in affording a list of reliable men practising on the Continent. Patients in their hands would be safe from enterprising quacks and other disgraceful types of doctors that swarm in certain health resorts throughout Europe. Dr. Sandwith proposed the health of "The Guests," coupled with the names of Sir Thomas Barlow, Sir James Dewar, Dr. Lucas-Championnière, and others. Suitable replies were promptly made, Dr. Edwin Rayner assuring the society of the goodwill of the British Medical Association, of which he was Treasurer. A hearty vote of thanks to the Chair having been passed, the gathering then broke up.

THE TEMPERANCE BREAKFAST.

To many members of the Association it will perhaps be news to learn that for no less than forty years past a breakfast given by the National Temperance League has formed a semi-official part of the general proceedings of the Annual Meetings. This year's breakfast took place on Thursday, under the chairmanship of Mr. Pearce Gould, and was well attended. The formal address was delivered by the Bishop of Kensington, who dealt with the responsibility of knowledge. On its conclusion Mr. Pearce Gould, after thanking the bishop, said that the special charm of his address lay in the fact that it precisely represented the particular view for which the National Temperance League stood. It would perhaps be regarded as an act of impertinence if an ordinary temperance society asked the medical profession collectively to such a function, but the League could do so with perfectly good taste. Medical men who accepted its invitations were present as members of a scientific profession. They were not asked to come committed to any position nor with any desire that they should commit themselves prematurely thereafter. The League stood for the promotion and diffusion of accurate knowledge on the subject of intemperance, and it was on that ground alone that it was justified in asking those present to attend. The report of Professor Karl Pearson, to which the bishop had referred, had caused too much commotion, both within and without temperance circles. The speaker was perfectly prepared to accept what Professor Pearson said about the value of his advanced mathematical methods, for on that subject he was an expert. But extreme mathematical knowledge and experience did not qualify the investigators for special recognition of the value of the data which had been submitted to this new and elaborate treatment. Any one in the room was as able to appreciate the value of the facts which Miss Elderton had examined as was Professor Pearson himself. For the purpose to which those facts had been put they were absolutely valueless. The report had been spoken of as a scientific document, but who would have anticipated that when the desire was to determine the effect of alcohol on heredity, the investigators would have seemingly taken pains to mix up in a confused heap teetotalers, excessive drinkers and so-called moderate users of alcohol? That mistake vitiated the report from the very beginning. The temperance element should have been eliminated from a certain section of the population and the results compared. There were hundreds and thousands of abstaining families all over the British isles the effect of whose lifelong abstinence could be quite easily examined if pains were taken to obtain the information in the right direction. During the whole life of the temperance movement it had proved difficult to determine where to draw the dividing line between strictly innocuous moderate drinking and excessive drinking, and yet they were now asked to believe that in Manchester and Edinburgh these innominate investigators had arrived at a scientific conclusion on the point forthwith. The data used were useless, and as in the case of a mill, if rubbish was put to grind at one end only rubbish would emerge at the other. Adding something in regard to his own experiences, the speaker mentioned that he had never suffered professionally by taking a distinct stand on the subject of abstinence. Among the pleasantest recollections of his professional life were hints and other expressions of gratitude from all sorts of men for not having given them that which he knew would have done them harm. Dr. Theodore Kocher, who followed, mentioned that he knew from experience that when he had to do much work, and good work, he must not drink alcohol at all. He was in entire sympathy with a movement which had for object the teaching of people that the only rational way to use alcohol was outside the body. Sir Thomas Barlow, in proposing a vote of thanks to the Bishop of Kensington and Mr. Pearce Gould, said that no one could deny that the League had always pursued its work with good taste and without one trace of bigotry. In seconding it, Sir Victor Horsley dealt further with the Galton Laboratory report, and stated that it had been disowned by the Chairman of the Eugenic Society, for which its authors were working. In spite of their general conclusion that the children of alcoholic parentage were just as healthy as the offspring of moderate drinkers, they came to the equally important conclusion that they died at a much earlier age. The speaker could not understand how one particularly healthy child could expire sooner than another. Further support for the resolution, which was promptly adopted, was forthcoming from Dr. C. F. Harford, who spoke of alcohol in West Africa, from Mr. McAdam Eccles, and from Mr. Robert Whyte, who expressed, on behalf of the League, its appreciation of the assistance rendered to it by those who had spoken and other distinguished members of the medical profession.

THE IRISH GRADUATES' ASSOCIATION.

THE only other extra-official event to which allusion can be made was the luncheon party and summer meeting of the Irish Medical Schools' and Graduates' Association. It took place at the Holborn Restaurant on Wednesday, Sir William Whitla presiding. Upwards of a hundred persons were present, so that the gathering, in which many ladies participated, was one of the largest on record. A toast to "The British Medical Association" was proposed by Dr. L. S. McManus, who had to resign his membership some years ago on becoming one of the Direct Representatives of the profession on the General Medical Council. Dr. McManus said the Association was very dear to the hearts of every one of his hearers, and no less dear to his own since he had been compelled to sever his connexion with it. He coupled the toast with the name of Dr. E. J. Maclean, whom he congratulated on having been placed in the chair of the Representative Meeting. Dr. Maclean, he said, belonged, like himself, to the Celtic fringe, without which the English were but an egg without salt. Dr. Maclean, in replying, said that this was in a way his maiden speech. It was the first time that at a social gathering he had had to respond

for the British Medical Association since he had been placed in the honourable position to which Dr. McManus had referred. He remarked that Dr. McManus was not now a member of the Association only because he was serving it and the profession in another place. He proposed the health of the Irish Graduates' Association, with whose aims he expressed the warmest sympathy, especially in respect of their work on behalf of the Poor Law medical officers of Ireland. Dr. William Douglas, the Provincial Secretary, having responded, the meeting came to an end.

GOLF DOINGS.

FROM the point of view of golfers the Annual Meeting week must have been at least as successful and enjoyable as from that of those not affected with this mania. Thanks to the energies of Dr. F. J. Smith and those who co-operated with him in attending to their interests, golfers had the opportunity of testing the virtues of practically every first-class course within easy reach of London. In addition there was the usual annual match between teams drawn from golfers resident in the locality in which the meeting is being held and visitors. The match took place this year on Wednesday afternoon at Northwood Links, the arrangements made by Mr. Percy Furnivall working out to general satisfaction. It proved what is known as a very close thing, London winning at length by ten matches to eight. The London players were Drs. Dane and H. B. Smith (both scratch), Dr. Foord Caiger, Mr. P. Furnivall, and Messrs. T. R. Atkinson, C. Graham, Barker, J. R. Walker, Hope, C. Wilkinson, Flitcroft, F. R. King, S. R. Schofield, Lewis Smith, Rubra, L. E. Creasy, F. J. Smith, C. R. Salisbury, and L. Hatch. The visitors, on the other hand, were represented by Dr. T. Sansome with a handicap of one, Dr. J. Carruthers with a handicap of two, and Messrs. Addis, Wilgress, G. E. Finlayson, F. G. Thomas, Permewan, H. Bawa, Habgood, A. Lucas, Sheehan, A. L. Jackson, J. A. Menzies, J. Blagden, McLeod, G. Stoker, Watson Williams, Macfie, and R. Prichard. The competition for the Ulster Cup, presented at Belfast last year, was held on the course of the Burhill Club. Play was over 18 holes against "bogey." The cup was won by Dr. G. E. Haslip (handicap 14), who finished 4 holes up. He went round in 88 strokes (45 out and 43 home). The second prize was won by Dr. Henderson Smith (6), all square, and the next best returns were: P. M. D. Magowan (16), 1 down; J. H. E. Austin (18), down; W. M. Farlowe (17), 2 down; and F. Macrae (18), 4 down. The prize for the best last nine holes was tied for by Dr. Haslip and Dr. Henderson Smith, each 2 up. Mr. E. C. Ryall (13) and Dr. M. Jay (11) were each 1 up, and Dr. L. E. Creasy (3) was all square.

THE SATURDAY EXCURSIONS.

THE remaining space available permits of but brief reference to the various excursions which ended the week. Their name calls up a vision of the Reception Room on Friday night, at so late an hour that it had already been invaded by charwomen, but was nevertheless still the scene of the unfinished labours of Mr. Charles Ryall, Chairman of the Excursions Committee, and his private assistants, Mrs. Ryall and Miss N. A. Proctor. Mr. Ryall was again to be seen at the railway stations in the morning, and somehow seems to have contrived to see off most of the half-dozen parties. Only two of them departed in much the same direction, those which went to Maidenhead and Windsor respectively. The former, numbering about 70 persons, went down with Dr. Stoddart, of Bethlem Hospital, at their head, and thence explored the river by boat as far as Henley, luncheon being taken on board the launch. At Henley they received a cordial welcome at the Phyllis Court Club, and were refreshed with tea, and at length arrived back in town with all scientific cobwebs thoroughly swept from their brains and just in time for dinner, and further journeys in various directions homewards. The Windsor party had an equally good time, and at the very start established almost a record in such connexions, by turning up 98 strong out of a possible 100. It was Dr. Probyn Williams who kindly played the part of Cook's conductor, and it turned out that he had secured for his party an opportunity of examining not only St. George's Chapel, the Library, and other features of Windsor Castle, but also the State apartments, which for the time being, and in view of the existing mourning, are closed to ordinary visitors. But this was not all, for, after luncheon at the Castle Hotel, he took the party down to Eton, when his place as guide, philosopher, and friend was taken by one of the resident masters, Mr. H. E. Luxmoore, and this famous school was thoroughly explored. Another excursion of a somewhat different order was the expedition to the Lord Mayor's Cripples' Home at Alton, on the invitation of Sir William Treloar and his fellow trustees. The party, under the guidance of Dr. King, travelled down from Waterloo with Sir William Treloar by a special train, and was met on its arrival by Dr. Gauvain, the resident medical superintendent, and Miss Robertson, the matron. There was also a contingent of Sisters and nurses, each of whom took charge of a separate detachment of visitors, and guided them through the various departments into which this very originally organized curative and educational home is broken up. In due course the guests sat down to luncheon, and on its conclusion received from Sir William Treloar a clearly-worded explanation of the origin and aims of this noteworthy institution for the benefit of an especially pitiable class. Later in the afternoon Dr. Gauvain gave an interesting demonstration of plaster work in the formation of splints and supports, and finally, after a visit to the Forest School and further refreshment in the shape of tea, the party started on its way back to town again by special train, arriving shortly after 6 o'clock.

EASTBOURNE, BRIGHTON, AND BATH.

THE other three excursions were further afield, two parties travelling to the South Coast, and one to the West of England. The two former expeditions were respectively paid at the invitation of the Chairman and members of the Eastbourne Division of the Association, and of the members of the Brighton Division in co-operation with the Mayors of Brighton and Hove. The Eastbourne party, some seventy strong, with Dr. W. Griffith at its head, was met on its arrival about 11 a.m. by members of the Division, and forthwith taken in coaches along the sea front to the top of Beachy Head, where a fine view and an excellent appetite was obtained. On return to the town other local members joined the party, and all sat down to the luncheon at the Devonshire Park Hotel, Mr. H. D. Farnell, Chairman of the Division, presiding. On its conclusion he proposed a toast to "The Association," giving, in the course of his remarks, a neatly worded and succinct account of its history, and of the part it has been and still is playing in the development of the nation. "It cannot be doubted," he ended, "that the welfare and best interests of the medical profession are inseparable from those of the community at large; the two must

go hand in hand." The toast was coupled by Mr. Farnell with the name of Dr. Griffith, who duly expressed the appreciation of the visitors alike of the cordial hospitality offered them and of the great advantages which Eastbourne has to offer to those in need of a pure atmosphere and exhilarating surroundings. He concluded by proposing the health of Mr. Farnell, who in acknowledging the honour, mentioned the name of Dr. Muir Smith, who as Honorary Secretary of the Division, had worked hard for the success of the visit. Dr. Muir Smith in his turn, however, passed on the credit to Dr. Merry and Dr. K. Fraser by whom, he said, the brunt of the work had been borne. The expedition to Brighton was in all essentials of a similar character, though the co-operation of their worships the Mayors of Brighton and Hove lent a touch of novelty to a visit to a town already so familiar to most people. The party found that the executive officer of the Division, Dr. Ryding Marsh, had arranged quite an extensive programme, which included in the morning a drive round Hove, a visit to St. Anne's Well Gardens, a luncheon at the Hove Town Hall, and in the afternoon a glimpse at the Brighton Aquarium and a reception in the grounds of the Royal Pavilion, with the Mayor of Brighton as host. During the luncheon hour the two Pilgrim Fathers of the party, Dr. Murray Leslie and Dr. Richard Lloyd, met all wishes by proposing toasts to the Division and to the Mayors respectively, and by acknowledging the very cordial reception accorded. The party got back to town soon after 7 o'clock, all being agreed that the day had been thoroughly well spent. To the new developments examined at Bath by the visitors on Saturday, it is proposed to make allusion in a separate article at a somewhat later date. Meantime it need merely be said that the response to the invitation furnished by the Mayor and Corporation of Bath was so ready that the long special train provided could have been filled twice over. The arrangements made by the Mayor, Major Simpson, with the assistance of Mr. Hatton, the Director of the bathing establishment, and the co-operation of Dr. Beaumont, the Honorary Secretary of the Division, and others of its members, were of a most generous and comprehensive nature, and proved thoroughly successful. In the after-luncheon interval the oratorical reputation of the Association was nobly upborne by Dr. Mott, in acknowledging a toast to its prosperity. In concluding his remarks he made a shrewd forecast of the immediate future, by saying that careful examination of the baths was likely to impress the visitors greatly with their value in the treatment of disease, and finally expressed the common feeling by remarking on the rapidity with which seemingly far away Bath can now be reached—something under two unfatiguing hours, over a perfectly constructed roadway. In the afternoon the party divided into two segments each of which in turn explored the baths, where demonstrations were in progress, and the principal streets and surroundings of the town in motor cars. Finally, all reassembled at the Roman Baths at a tea party given by the Chairman of the Division (Dr. Preston King) and the rest of its members. This, however, was by no means the real end of the excursion, for a large contingent stayed the week end, and on Sunday, as the guests of the Division, spent an absolutely perfect day on an expedition to the Cheddar Valley, and its famous gorge and caverns, under the guidance of Dr. Kennedy and Dr. Beaumont. The various stewards appointed to look after visitors on Saturday each wore a blue cornflower as a buttonhole, and the kindness received at their hands was so great that for many visitors this flower will in future be ever associated in their minds with a pleasant picture memory of Bath's stately streets and its waters and hills.

THE ANNUAL EXHIBITION.

THE Annual Exhibition held this year was on such a large and important scale that an extended account of it will be necessary. It is not desirable to split it up into too many portions, and as the space available in the SUPPLEMENT to this issue is too limited to permit of notice of many of the stands, commencement of publication of the account has been deferred until next week.

LOST PROPERTY.

BEFORE bringing these Annual Meeting notes to a conclusion, it may be well to point out that notice has been received from the police office at the Natural History Museum at South Kensington of its possession of a considerable number of gloves, handkerchiefs, trinkets, and other property left behind by those who attended the *conversazione* on Friday night. It is unnecessary to give a list of them, as those aware of any loss will probably be able to recover their property on furnishing a description to the officer in charge of the station in question.

MEDICAL BRANCH OF THE NAVY LEAGUE.

THE first general meeting of the Medical Branch of the Navy League was held on Friday, July 29th, 1910, at the University of London. Dr. W. P. Herringham, the Chairman of the Provisional Committee, said that some months ago it was thought advisable to form a branch of the Navy League for medical men. They saw a good deal of the world, and could influence people as no other class could do. Notices suggesting the formation of a branch were sent round, and a considerable number of members had already joined. This, however, was the first formal meeting. Dr. Maurice Craig moved, and Dr. Percy Smith seconded, "that a Medical Branch of the Navy League be and is hereby formed." This was unanimously agreed to. The Chairman announced that Sir Richard Douglas Powell had consented to act as President of the Branch. (Applause.) He moved that he be elected to the office. This was carried by acclamation. Sir Richard Douglas Powell then took the chair. The following were elected as officers and council: Mr. Lenthal Cheatle, Dr. Clayton-Greene, Dr. Fawcett, Sir Alfred Fripp, Dr. Herringham, Dr. Latham, Mr. W. Lister, Dr. Macnamara, Mr. Pendlebury, Mr. Hugh Rigby, Dr. Risien Russell, Dr. Scurfield, Dr. Lewis Smith, Mr. Swainson, Dr. Campbell Thompson, Dr. Turney. Sir R. Douglas Powell stated that the Prime Minister observed some time ago that the maintenance of a sufficiently powerful navy was essential for the preservation of the vital interests of forty millions of people in these islands. He might also have said it was necessary for the vital interests of many more millions of Imperial and Colonial subjects of the King. The Chancellor of the Exchequer said he regretted that matters of social reform had to be deferred for the building of Dreadnoughts. The nation felt that social security must have precedence of social reform. Reforms were no good unless they were based on the security of the country. The Medical Branch of the Navy League was not for the purpose of supplying medical aids and comforts in time of war, but for the purpose of securing the interest and advocacy of medical men in favour of the provision of a strong navy. Medical men had immense power. Each of them had great local

power and prestige, and had the means of influencing a considerable clientèle of his fellow subjects. What they desired was that each member of the branch should exercise that influence in his own neighbourhood. Commander Crutchley (Secretary of the Navy League) also addressed the meeting as to the general objects of the Navy League. Dr. Maurice Craig, in moving a hearty vote of thanks to Sir Richard Douglas Powell for being present at the meeting and for kindly consenting to become the president of the branch, stated that the membership was steadily increasing, and every one intended that this branch should become a large and powerful one. The five shilling members were as important as the guinea ones, and it was felt that a large number of medical men would pay the smaller subscription in order to further the welfare of a great cause. Applications for membership should be sent to the Honorary Secretary at 54, Welbeck Street.

LEGISLATION FOR THE FEEBLE-MINDED.

An influential and representative deputation organized by the National Association for the Feeble-minded, and including the Earl of Meath, Lord Shuttleworth, Lady Frederick Brudenell Bruce, Lady Frederick Cavendish, the Hon. Maude Stanley, Sir E. Brabrook, Mr. Noel Buxton, M.P., Mrs. Hume Pinsent, Drs. Ferrier, H. Corner, Langdon-Down, Tredgold, May Dickinson Berry, and Ettie Sayer, waited upon the Prime Minister, on July 15th, to urge the necessity for early legislation upon the lines recommended by the Royal Commission for the Care and Control of the Feeble-minded. The deputation was introduced by Mr. W. H. Dickinson, M.P. The subject was spoken on from different points of view by Sir W. Chance, Sir T. Acland, the Bishop of Stepney, Mr. Willis Bund, Miss Dendy, Dr. Shuttleworth, Dr. Bickersteth (Vicar of Leeds), and Mr. Montague Crackenthorpe. The Prime Minister, who was accompanied by the Lord Chancellor, the Home Secretary, and the President of the Local Government Board, said he was glad to have had an opportunity of hearing those who had a first-hand knowledge of the subject, and, remarking on the complicated nature of the problem, assured the deputation that the great desire of the Government was to contribute what they could towards a solution. The Lord Chancellor also recognized the vast importance of the subject and the duty which lay on the Government to consider a remedy, with due regard to safeguards against abuse of any fresh powers of control or detention that might seem expedient. Mr. Churchill referred to the effect which feeble-mindedness had upon criminal statistics, and considered that public policy called for systematization in the care and assistance of the 120,000 or 130,000 feeble-minded persons at large in our midst. If by any arrangement, rendered possible in an advancing Christian and scientific civilization, the prevention of the multiplication and perpetuation of this great evil could be brought about, we should have taken upon our shoulders in our own lifetime a work for which those who came after us would owe us a debt of gratitude. Mr. Burns remarked that the arguments urged by the deputation, and the facts and figures quoted, were already before various departments of State, who were considering how best to carry out some of the minor propositions and suggestions that had been made. The question, however, of compulsory detention and enforced control of the feeble-minded was not one which could be dealt with lightly; but he could say that the serious subject brought before them by the deputation appealed to official sympathy, and so far as was practicable by administrative measures, aid was being given to the object they had in view.

The King and Queen paid a visit to the London Hospital on Saturday, July 30th, and Lord Rothschild, treasurer of the King Edward Hospital Fund for London, has since received a letter from Sir William Carington stating that he is commanded to acquaint him with the King's gracious intention to augment His Majesty's yearly subscription to the King Edward Hospital Fund for London from £500 to £1,000, and enclosing a cheque for £500. The cheque is dated July 30th, as the King is anxious that the date of the augmentation should coincide with that of His Majesty's first visit to a London hospital since his accession.

LITERARY NOTES.

The printer's devil is in one respect like charity—he covers a multitude of sins for which authors, and others, are really accountable. But sometimes he is guilty. Last week his defacing fingers swept a beautiful line of Arthur Hugh Clough, to whose shade we deem it a duty to make such reparation as is possible for making him write bad grammar. In the verses quoted at the end of the leader on the President's Address in the Journal of July 30th, the last line should read:

> Comes silent, flooding in, the main.

It may interest some readers to know that the lines are from a poem entitled, "Say not the Struggle Nought Availeth." As the quotation referred to the long struggle of the Association for the welfare of the people and the better organization of the profession, we may be allowed to quote the concluding lines, which should further encourage us to take the poet's advice and "Say not the Struggle Nought Availeth."

> And not by eastern window only,
> When daylight comes, comes in the light;
> In front, the sun climbs slow, how slowly!
> But westward, look, the land is bright.

The issue of *Black and White* for August 6th is of special interest to the medical profession. It contains a large number of drawings and photographs illustrating the visit of the King and Queen to the London Hospital. In addition to these there is an article on the work of the hospital by Raymond Blathwayt, excellently illustrated by T. Peddie.

Dr. Alfred C. Jordan (London) writes, quoting the following passage from *Lives of British Physicians*, published in 1830 by John Murray, Albemarle Street. It is of interest in view of the present popularity of soured milk:

Soon after his return from Scotland, the anatomical skill of Harvey was employed, by the King's command, in the dissection of that extraordinary instance of longevity, Thomas Parr, who died November 14th, 1635, at the age of 153 years. He was a poor countryman, who had been brought up from his native country, Shropshire, by Thomas, Earl of Arundel, and shown as a great curiosity at Court. At the age of 88, he had married his first wife; at 102, he had done penance in church for a breach of the laws provided against incontinency. When he was 120 he married again, taking to wife a widow, with whom he is represented to have lived upon the most affectionate terms. At 130, he had threshed corn, and done other agricultural work, by which he gained his livelihood. His usual habits of life had been most sparing; his diet consisting of coarse brown bread, made of bran; of rancid cheese, and sour whey; but when, on his arrival in London, he became domesticated in the family of the Earl of Arundel, his mode of living was changed, he fed high, drank wine, and soon died.

According to Harvey, who opened his body, his death was occasioned by a peripneumony, brought on by the impurity of a London atmosphere, and the sudden alteration of his diet. There were adhesions of the lungs to the pleura on the right side; his heart was large, his intestines sound; but the cartilages of his ribs, instead of being ossified, as they generally are in elderly persons, were, on the contrary, soft and flexible in this man, who was more than a century and a half old. His brain was sound; he had been blind for twenty years before his death, but his hearing was distinct; his memory was very bad.

England and Wales.

[*FROM OUR SPECIAL CORRESPONDENTS.*]

LONDON.

THE COUNTY COUNCIL.

Medical Treatment of School Children.

THE Education Committee reported to the London County Council last week that it had been in communication with the governing body of the Royal Free Hospital, Gray's Inn Road, with reference to the treatment, by means of *x* rays, of children suffering from ringworm. Under existing arrangements, children attending schools in West Islington and the adjoining districts were referred to Charing Cross Hospital. The Royal Free Hospital would be more convenient for schools in this area, and full advantage could be taken by children from other parts of London of the accommodation set at liberty at Charing Cross Hospital. The arrangements made with other hospitals provided that 100 cases a year should be guaranteed for each clinical assistant working one half-day a week, at a cost of £85. The Committee did not feel able to guarantee a sufficient number of cases for treatment at the Royal Free Hospital to justify the engagement of a clinical assistant for one half-day a week. The governing body was prepared, however, to undertake the treatment of 50 ringworm cases in twelve months, at a charge to the Council of 17s. a case, including the services of a medical practitioner. The offer was accepted.

After the adjournment of the Council for the summer recess the Education Committee met and dealt with several questions of medical interest.

Schoolkeepers and Vaccination Exemption.

The General Purposes Subcommittee drew attention to the case of a caretaker who had made a statutory declaration of conscientious objection to the vaccination of his child. In view of the fact that, should an outbreak of small-pox occur, children of schoolkeepers and caretakers would be more liable than other children to contract and spread the disease, the subcommittee had given the matter very careful consideration, and recommended that in all cases where members of a caretaker's household had not been vaccinated, vaccination should be performed within twenty-four hours, or the schoolkeeper should cease work and he and all members of his household should vacate the premises, no salary to be paid during absence. This was approved.

Medical Fees in Accident Cases.

The Council holds itself responsible for the payment to doctors of the fee for the first attendance upon scholars meeting with accidents at school. The General Purposes Subcommittee stated that the amounts claimed by medical practitioners under this head varied considerably, but when they were well within the rates prescribed by the Local Government Board for Poor Law administration the subcommittee agreed to the charge made. It was desirable, however, that a standard charge should be fixed, and the subcommittee advised the fixing of the following scale: Attendance on child taken to doctor's surgery, 3s. 6d.; when a doctor has been called, 5s. This was agreed to.

The Paddington School for Tuberculous Children.

The Board of Education notified the Education Committee that it was only prepared to give favourable consideration to the proposal to establish a school for tuberculous children in premises provided by the Paddington Dispensary for the Prevention of Consumption,[1] provided the scheme was confined to children having incipient phthisis, or having the disease in a definite form, either of a subacute or chronic nature. The original proposal was that children suffering from tuberculosis, children predisposed to it, or children who had been discharged from sanatoriums and were being treated at the dispensary, should be included in the scheme. If the promoters were prepared to modify their proposals in this respect the Board intimated that it would consider the matter further. The Committee decided to notify the dispensary of this alteration in the scheme.

Provision for Sane Epileptic Children.

The Committee decided on July 6th to ask the Home Secretary to receive a deputation urging the need for legislation with regard to the care and control of the feeble-minded, particularly with regard to making provision for sane epileptic children.[2] It was reported that the General Purposes Committee had vetoed the proposal, on the ground that the Council had not yet considered the report of the Royal Commission, and that to send a deputation would be to commit the Council in advance.

Queen Victoria Jubilee Institute of Nurses.

The Children's Care Committee presented its report upon the experimental scheme for the treatment of children suffering from suppurating ears by "Queen's" nurses in Hackney, Shoreditch, and Bethnal Green.[3] The results, the Committee stated, were not altogether satisfactory, owing mainly to the difficulty of obtaining the medical prescriptions necessary before treatment could be commenced. (It will be recalled that the Metropolitan Counties Branch of the British Medical Association objected to the Council arranging the doctor's prescription for him.) The Committee thought it very desirable that the most satisfactory method of dealing with children suffering from a complaint which required attention two or three times a day, sometimes for long periods, should be discovered, if possible. A further experiment, to ascertain finally whether the Queen Victoria Jubilee Institute of Nurses could be utilized for this purpose, should be made, and in the more favourable district of Paddington. This district of the Institute contained several good dispensaries, and so there would be less difficulty in obtaining medical prescriptions. The Paddington Nursing Association was prepared to undertake the work if the Council paid for the extra help required. An agreement with the association for this purpose was approved.

Difficulty had been experienced in connexion with the treatment of children suffering from affections of the eye and ear, at the Woolwich medical treatment centre, owing to the failure of parents to carry out the instructions of the doctors as to the insertion of atropine in the eyes and the syringing of the ears. The governing body of the Woolwich Cottage Hospital, which is responsible for the centre, stated that the Woolwich Nursing Association was willing to provide, for £40 a year, a nurse who would assist the parents in carrying out the doctors' instructions The Committee accepted the offer for six months.

The Norwood medical practitioners having reported that they found the cost of ringworm treatment to be 7s. per case, the Committee agreed to pay this sum in respect of each of the children treated.

BIRMINGHAM.

A MEMORIAL TO KING EDWARD VII.

THE Marquis of Hertford, Lord-Lieutenant of Warwickshire, presided over a county meeting on July 20th, which was called to consider the question of raising a memorial to King Edward. It was resolved that a memorial should be erected in the county, and that the best form for it to take would be the establishment of an open-air hospital for the treatment, of an instructional character, of persons suffering from consumption.

TUBERCULOSIS IN WARWICKSHIRE.

Dr. Bostock Hill, in his annual report for 1909, estimates the population of Warwickshire at 401,868. The number of deaths registered was 5,238, giving a

[1] BRITISH MEDICAL JOURNAL, March 26th, 1910, p. 780.

[2] BRITISH MEDICAL JOURNAL, July 2nd, p. 43.

[3] BRITISH MEDICAL JOURNAL, February 11th, 1909.

rate of 13.03 per 1,000. The number of deaths from phthisis and other tuberculous diseases was 428, being fewer than in 1908, when the number was 451. The medical officer of health strongly advocates compulsory notification, the adoption of some step to educate children and adults as to the means to be taken to prevent the disease, and the disinfection of dwellings and bedding after death. All district councils should obtain proper means of disinfection. He attaches considerable importance to the exhibition of warnings against spitting, and to the sterilization of milk. With regard to the provision of sanatoriums, he notes that small-pox hospitals are not used for considerable portions of the time, and suggests that they might be utilized for the reception of tuberculous patients for limited periods. Birmingham has decided to use some of this accommodation, and a conference of representatives of district councils might lead to some definite line of action.

First Southern General Hospital, Territorial Force.

At a meeting of the Warwickshire Territorial Association, held in Birmingham on July 22nd, the Marquis of Hertford presiding, the reports of the Birmingham Branch of the British Red Cross Society upon the site and equipment of the 1st Southern General Hospital were read. The site had been selected and the arrangements for the equipment were almost completed. Colonel Whitcombe, the Administrative Medical Officer of the South Midland Division, had been consulted with regard to the site, and wrote that it "is, in my opinion, admirably suited for the purposes of a general military hospital, and can be easily adapted in the necessary time and at a minimum of cost. The plans accompanying this report have been drawn up by Major Sawyer, the Registrar of the 1st Southern General Hospital." The President said it was very satisfactory to hear that the hospital had been started on proper business-like lines. He thought that it was one of the first in the country that could send in such reports as had been read. That had not been done without a good deal of hard work on the part of those concerned, and he therefore moved a resolution expressing cordial appreciation of the care and interest taken by the Birmingham Branch of the British Red Cross Society in preparing the hospital scheme, and cordially thanking Lieutenant-Colonel Jordan Lloyd and Major Sawyer, administrator and registrar respectively, for the trouble they had taken in the matter.

LIVERPOOL.

St. Paul's Eye Hospital.

The foundation stone of the new St. Paul's Eye Hospital was laid by Lord Derby on July 21st. There is to be a special department for the treatment of ophthalmia neonatorum, into which the recently confined mothers can be admitted, along with the infant invalid. This department is to be a memorial to the late St. George E. Walker, who founded the hospital about forty years ago. The building is to cost £15,000, of which about £12,000 has been subscribed.

Garden Suburb.

On the same day the Marchioness of Salisbury laid the foundation stone of the first house in a garden suburb which is being made by the "Liverpool Garden Suburb Tenants Co., Limited" on co-partnership principles. One hundred and eighty acres of land have been obtained from the Marquis of Salisbury on a 900 years' lease; the site is within easy reach of the centre of the city in the Wavertree district, and is intersected by the Queen's Drive, a boulevard 107 ft. wide which is at present being constructed by the Liverpool Corporation. The estate is to carry ten or twelve houses to the acre. An attempt is thus being made to provide attractive and healthy housing accommodation on the outskirts of the city for people of moderate means. No town has greater need of such a scheme than Liverpool, for in the past the building has been conducted without any co-ordinated plan, every jerry builder being allowed to run up just whatever class of houses he thought would make an immediate return on the smallest amount of expenditure. A somewhat similar scheme for working-class tenants is being started at Sealand, on the Dee, about six miles from Chester. Ten acres of land have been obtained with an option of thirty more. It is proposed to erect about forty-seven cottages to the acre, the rents to be from 5s. to 8s. a week. These cottages are to be inhabited by the men at the large steel and iron works in the neighbourhood, the distance being small enough to allow the men to get their meals at their own homes.

Scotland.

[*FROM OUR SPECIAL CORRESPONDENTS.*]

Edinburgh Royal Infirmary.

At the weekly meeting of the managers of the Royal Infirmary, on Monday, July 25th, Dr. George A. Gibson, Ordinary Physician; Dr. R. A. Fleming, Assistant Physician; and Dr. A. H. Sinclair, Assistant Ophthalmic Surgeon, were reappointed to their respective posts for further periods of five years each as from the month of October next.

Edinburgh Royal Maternity and Simpson Memorial Hospital.

Dr. Ballantyne, with Dr. Oliphant Nicholson as Assistant, will be Physician in Charge for the quarter beginning August 1st. For the same period R. C. Alexander, M.A., M.B., Ch.B., has been appointed Senior House-Surgeon, and Keith K. M'Glashen, M.B., Ch.B., Scott Scholar, Junior House-Surgeon.

Medical Research Award.

The medal and prize of the Medico-Psychological Association of Great Britain and Ireland has been awarded to Dr. Hugh Morton, Glasgow, for the best dissertation on the "Bio-Chemistry of the Cerebro-spinal Fluid in the Insane." Dr. Morton is attached to the Royal Asylum at Gartnavel and the Scottish Western Asylums' Research Institute.

Bignold Hospital, Wick.

A public meeting was held at Wick last week to consider the financial crisis which has occurred in the affairs of the Bignold Hospital in consequence of the intimation that Sir Arthur Bignold declined to continue his annual donation of £300 to the funds of the hospital. Sheriff Stuart presided, and there was a very representative attendance. It was explained that Sir Arthur Bignold had spent about £6,000 in building, equipping, and partially endowing the hospital, and since its opening in 1903 he had given an annual donation of £300 to its funds. The annual outlay was about £500. The income from endowments and subscriptions was £124. It will, therefore, be necessary to find some means of raising an additional £350 or more per annum if the institution is to be carried on. Resolutions were passed expressing regret at the loss of Sir Arthur Bignold's support, but thanking him for his generous gift of the institution, and agreeing that a direct personal appeal should be made annually to the people of Wick, Thurso, and the County of Caithness on behalf of the hospital funds.

Offensive Trades in Glasgow.

In a lengthy article contributed to the *Glasgow Herald* Mr. John Lindsay, Deputy Town Clerk, discusses the question of offensive trades in the city and the difficulties in the way of remedial action on the part of the authorities. In recent times many protestations have been voiced against certain trades, such as gut cleaning, tanning, glue making, etc., near residential localities, and the Town Council has been appealed to to protect the citizens against the offensive odours inseparable from such works. These trades are, of course, regulated by the provisions of the Public Health Act, and the number within the city at

the present time is 34, no less than 24 being situated in the east end of the town. Traders before carrying on any of the businesses known as "offensive trades" must obtain the sanction of the local authority. But the local authority must find reasonable grounds for refusing its sanction, and where the conditions of the statute and by-laws have been fulfilled the Corporation as local authority has practically no option. There is the right of appeal to the Local Government Board, whose decision under the Act is final. Within the past twelve months two cases were dealt with by the authority and in each case very strong local opposition was offered to the applications, which were for extension of premises. The Corporation after proof and debate decided to grant the applications and the objectors appealed to the Local Government Board. The Board sent two representatives to inspect the premises, one a medical member and the other a King's Counsel, and on their reports the appeal was dismissed. Both the Corporation and the Board were compelled to recognize the fact that the businesses, though offensive, were perfectly legal, and must therefore be recognized so long as they were made subject to regulation and control under the Act. Of course it is the business of the Corporation to see that the trades are carried on in conformity with the regulations laid down, and to prosecute those who disregard these regulations; but it is important to note that the Act does not provide for sanction, once legally granted, being withdrawn or recalled.

There is a very stringent provision which may be enforced if effluvia be certified as a nuisance, or injurious or dangerous to health. If it can be shown that the best practicable means have not been used for removing the nuisance or counteracting the effluvia, the author or the occupier may be fined £50. The local authority are unable to take this action save on a certificate by their medical officer of health, or on a representation by a parish council, or a requisition by ten ratepayers; and if they take proceedings the court may suspend a final decision on condition that the offender undertakes to remove the nuisance within a reasonable time, or take such steps as will mitigate or prevent the danger from the effluvia.

These provisions apply not only to cities but are applicable throughout the country. There is a general view that local authorities have an absolute power of veto, and this very lucid and comprehensive paper by an expert, on a vexing question, will serve to dispel much misconception of the position of affairs.

Inverness-shire Sanatorium.

The results of the treatment of the patients in this sanatorium at Aberchalder are increasingly satisfactory. The daily average number of patients in residence during the year was 15. The weekly average cost of patients per head worked out at 27s. This includes both maintenance and administrative charges.

Ireland.

[*FROM OUR SPECIAL CORRESPONDENTS.*]

The Grievance of the Irish Midwives.

Last week the Master of the Rotunda Hospital wrote a letter to the *Irish Times*, pointing out the grievance caused to Ireland by its exclusion from the Midwives Act. In this he quotes Mr. Birrell's reply in answer to a question from Viscount Castlereagh as to whether he proposed to introduce a measure dealing with midwives in Ireland on the lines of the legislation already in operation in England, subject to the necessary modifications to meet special Irish conditions. The Right Hon. Mr. Birrell is reported to have replied: "I do not propose to introduce legislation on the subject—at all events during the present session. I would point out that there is not the same urgency in the matter in Ireland as in England, having regard to the powers which boards of guardians in Ireland already possess." Dr. Tweedy points to the latest statistics of the deaths of women associated with pregnancy and childbirth in Ireland. These show that 6.3 per 1,000 of these women die in Ireland, compared with 4 81 per 1,000 in England and 2 per 1,000 in the Irish maternity hospitals and institutions, to which the most serious cases are sent. These figures speak for themselves. The Royal College of Physicians of Ireland and other public bodies have expressed a unanimous and urgent desire to have the Act extended to this country, and that Ireland should obtain an adequate representation on the Central Midwives Board. In Ireland at present once a midwife has obtained her hospital certificate, the institution which qualifies her ceases to have power to influence her future conduct. She may be profligate, dirty, dishonest, or drunken; sepsis may follow her in epidemics, and yet there is no power at present available in Ireland to prevent her practising.

The governors of the Rotunda Hospital have memorialized the Irish representative peers on the subject, drawing attention to the fact that, as the Midwives Act of 1902 stands, it is quite possible for the Central Midwives Board to frame rules which will preclude Irish trained midwives from practising in England, and will largely lessen their chances of employment in the Colonies. Rules have already been framed which have had this result; and under the Act Irish trained midwives can practise in England only by a special concession of the Central Midwives Board, which may at any time be withdrawn. Since the establishment of a State registration for midwives it has been an almost universal requirement in advertisements for appointments in the Colonies that the State degree must be held, and military authorities at the Curragh require a diploma from those replying to their advertisements. This means that an Irish midwife must cross to England and remain there ten days and spend money for her diploma before presenting herself for any of these appointments. A stigma is thus cast on Irish midwives, in spite of the fact that the time devoted to their training is longer than that required by the Central Midwives Board.

During the Committee stage of the Midwives (No. 2) Bill in the House of Lords on July 26th, Lord Clonbrock moved to add a new clause to provide for the certification of midwives trained in Ireland. Earl Beauchamp said he had been in consultation with the Chief Secretary for Ireland with regard to this subject, and the Government was now prepared to deal with it; he was unable, however, to indicate the lines of the bill which would be required. It is to be hoped, therefore, that this grievous injustice to Ireland will now be remedied.

Royal College of Surgeons in Ireland.

The President of the Royal College of Surgeons in Ireland has addressed a letter to the Chief Secretary of Ireland to direct his attention to the anomalous position of the College and its school of medicine and surgery, and to the wrong done to the College, its school of medicine, and to the public interest, by the fact that while every other school of medicine in Ireland now receives through its governing body ample financial support from Parliament, the school of the College of Surgeons receives no such support, and has to depend upon its earnings and upon the very limited contributions which the council is able to give it out of the straitened College funds.

The council of the College of Surgeons, of course, has no objection to the support given by Parliament to other medical schools, as the State requires and controls medical education, and no medical school can be carried on in the manner demanded by modern medical teaching without considerable subsidy from some source. But the school of the College of Surgeons has been placed at a great disadvantage—amounting to a practical injustice—by the action of the Government, which has supplied its immediate competitors with ample funds, by which they may flourish, attract students, and provide them with a high standard of teaching. It must be remembered

that the Royal College of Surgeons has done good work for a century and a quarter, and, conjoined with the Royal College of Physicians of Ireland, are the largest qualifying body in Ireland and the third largest in the United Kingdom.

The school has already suffered considerably, the number of class tickets sold for last Winter Session was 350 compared with 421 for the previous winter, and this though the Council had expended £1,000 on the Anatomy Department in the early part of 1909. The chief claim to a parliamentary grant is that without such aid it is impossible to provide the high standard of teaching necessary in these times for the training of medical men. "It may be conceded," the letter concludes, "that the Government have some great responsibility with regard to a chartered institution which was originally founded with the help of a parliamentary grant, and we feel that if the money already granted is not to be wasted, the Government should now step in to our aid and give us such assistance as will enable us to bring the institution up to the level of modern requirements in medical education, and thus put us in a position to discharge the duty imposed upon us by Charter."

REGISTRAR-GENERAL'S REPORT.

From the annual report of the Registrar-General for Ireland for 1909, it appears that during that year the natural increase in the population of Ireland was 27,786, but that owing to the loss by emigration the total population diminished by 890, the number of emigrants being 28,676. This number of emigrants, of whom 14,916 were males and 13,760 females, exceeds the number in 1908 by more than 5,000, but is considerably less than the average number during the last ten years. About 86 per cent. of the emigrants were between 15 and 35 years of age. The marriages registered during the year numbered 22,650, which represents a rate of 5.18 per 1,000 of the estimated population, as compared with 5.20 per 1,000 in 1908. The highest rate was 7.20 per 1,000 for the County Borough of Dublin, and the lowest 3.4 per 1,000 for the County Mayo. The births registered were 102,759, of which 99,997 were legitimate and 2,762, or 2.7 per cent., illegitimate. Of the total number 52,726 were males and 50,033 females. The highest local rates were 31.7 for Dublin County Borough and 28.3 for Belfast County Borough, the lowest being 18.4 and 18.5 for the counties Cavan and Roscommon respectively. The total number of deaths was 74,973, equivalent to a rate of 17.2 per 1,000. This rate is 0.6 below the average for the last ten years. The highest local rate was 23.4 for Dublin County Borough and the lowest 13.1 for County Kerry. The mortality from tuberculous disease has diminished by 0.2 per 1,000, as compared with 1908, but tuberculosis is still responsible for 14 per cent. of the whole mortality of the country.

Correspondence.

HEREDITY AND ENVIRONMENT.

SIR,—I am not concerned to try to prove the accuracy of Dr. Ashby's data. That is quite unnecessary. It may, however, be interesting to those who have read Dr. Potts's letters to know from what points chiefly the question of alcoholism in the parents of the Manchester feeble-minded children was decided.

To begin with, Dr. Ashby had exceptional opportunities of knowing and understanding Manchester mothers. It frequently happened that the women who brought their children for examination to the special schools had been previously seen by him at the Children's Hospital.

In almost every case reported on the parents, either one or both, of the child were seen. Occasionally it was not possible to find the parents, but this was rare. Generally it was the mother who brought the child; sometimes it was the father; sometimes both. It frequently happened that an aunt or grandmother would come with the mother. Very frequently a baby or two was brought as well as the child in question.

A mother and child are a good sample of the home and its conditions. The children, so far as conditions went, could be roughly divided into four classes:

1. Well-fed and cleanly-kept children with good habits. Now, if a woman can keep a feeble-minded child in this state, there is good evidence that she does not drink. The appearance and demeanour of such mothers as these bore out their statements that they were sober, and the good nourishment and clothing of the child and its mother were evidence that the father was also sober. Such women as these could generally tell precisely what their husbands earned.

2. Well-kept and trained, but ill-nourished children, whose clothing as well as that of their mothers pointed to poverty. Here, again, the condition of the child would indicate the fact that the mother was not a drunkard, but a sober woman trying to make the best of adverse circumstances. Such women would often not know what their husbands earned, but only what they received. In such a case it might well be that the father was a drunkard. Evidence of this was often forthcoming. On the other hand, he might be merely a selfish, brutal man, earning good money, and keeping the bulk of it for himself, or he might be a wastrel, never sticking to one job for long together.

3. Well nourished but ill-trained and ill-kept children. In these cases it was evidently often the fault of the mother that things were not better. If she drank the fact would be patent to any doctor; if the father drank the money would have not have been found to feed the wife and children. Sheer incapacity was much more often at the root of the trouble than drink.

4. Children who were both badly kept and badly nourished. Such cases generally had slatternly mothers of very low mental capacity. Sometimes they were obviously alcoholic, but more often merely shiftless, low-grade women wholly unfit to have the charge of children. Such women rarely had husbands in good work; the whole family would be degraded. Sometimes the mother was unmarried. Often evidence was forthcoming that the father was a drunken ne'er-do-weel. More often, still, he was definitely weak of intellect. In these two last classes the mother would herself often be of feeble mind. Beyond the evidence to be drawn from the condition of the mother and child was that to be drawn from the employment of the father. A man who was a member of the fire brigade or of the police force, who was employed as a tram driver, or a night-watchman by the corporation, would not be a drunken man. He might, however, be married to a woman of very low mental power or a drunkard. A carter, earning 25s. a week, would not be likely to be a drunkard, though he might have drinking bouts occasionally. There are other trades in which frequent drunkenness would ensure dismissal.

All these points were taken into consideration by Dr. Ashby, as well as the reports made by school teachers, school-attendance officers, and our superintendent of special schools, Miss Dickens, who herself visits the homes of these children.

There were amongst the cases some twenty-five idiots and imbeciles; these had not been presented to Dr. Ashby for examination, as he had not time to visit their homes; Dr. Lapage kindly did so, acting as Dr. Ashby's deputy.

Going now to the other side of the question—that of normal children with drunken parents and bad home conditions—I do not know whether Dr. Potts will accept what I say; but this is the state of things:

The most miserable and neglected children of the city are sent to industrial schools. It is a matter of common knowledge that those who are sent to residential schools do remarkably well: over 90 per cent. are definitely successful in life. These schools do not now accept children who are weak-minded in any degree, except in one or two instances where special provision is made for such cases.

The children of our day industrial school, almost without exception, are the children of drunken, idle, shiftless folk. Sometimes the child of a respectable widow or widower will find its way there because it has been playing truant, the parent not having been able to give it proper attention.

In the last fifteen years only three feeble-minded children have been found in this school. There were none there when Dr. Ashby made his first examination of

school children previously to the establishment of special schools.

These children soon recover health and spirits in the school. Three meals a day makes a great difference to them; their misery is only skin-deep.

It is part of my duty as a member of the Manchester Education Committee to take my turn in seeing parents who do not send their children to school or who have omitted to pay maintenance charges for Mill Street or a residential school. Amongst these I see plenty of alcoholics, but they are rarely the parents of the children I know as feeble-minded. Occasionally the cases are very pitiful, as when a mechanic earning good money cannot keep his home and children decently because a drunken wife will constantly sell the house up to get drink.

Against his case may be put one which I have known all the particulars for many years. The father is a superintendent of police; the mother a very frail, refined woman, highly neurotic. The mother's mother lives with them and I personally know the mother's sister. All are teetotalers and there is an excellent family tradition of morality. The only child was an imbecile epileptic. One night the father turned back as he was leaving my room and said, "If I had known sooner what you have written about feeble-minded children, I would never have married." It turned out that he had a brother in an asylum.

On one occasion I kept house for nine months for a family whose head had broken both his arms. He was a painter in good work, earning 35s. a week (it is a seasonal trade). He had been drunk every Saturday night for seventeen years. We did not wish these people to come upon the rates, so collected a small sum weekly for their maintenance. There were seven children living, one, the eldest girl, at work. Several has died. None of these children was feeble-minded. The first week the mother spent all the money on meat-pies and ginger-beer; there was nothing left by Wednesday. Thereafter I went and brought in the provisions twice a week. The man kept sober for nine months; he was long in getting well; when he did recover the family disappeared—tired, no doubt, of enforced decent living.

It would be easy to multiply cases such as these for the benefit of those who prefer this kind of evidence to that gathered from statistics. When personal experience of this sort is confirmed by such work as Miss Elderton's and Professor Pearson's it is difficult for the ordinary lay mind to remain unconvinced.

Statistics are dangerous things in the hands of those who do not know how to use them. An instance of this was found when I made my first examination of school children. I had every prejudice in favour of environment as causing all the troubles under the sun. I was puzzled to find fewer feeble-minded children in the two poorest schools of our town than in any others. It was suggested to me that it was possibly because many of the children in those schools were canal-boat children and got more fresh air than did others. I now see that the probable explanation is that the canal-boat folk are more prone to marry away from their immediate surroundings than other town dwellers, and so bring new blood into their families.

I must apologize for this long letter. My excuse is that I do not wish that any one who has noticed this correspondence should think that there has been either carelessness or prejudice in the collecting of the material sent to Professor Pearson.—I am, etc.,

Manchester, July 25th. MARY DENDY.

SANATORIUM TREATMENT OF TUBERCULOSIS.

SIR,—The valuable letters of Dr. Paget-Tomlinson and Dr. John Guy in your last issue tend to emphasize the very points I have at heart and which I am quite sure the medical profession also have at heart. We all want to find an exact measurement of the improvement introduced by sanatorium treatment. There is only one way in which this can be done, namely, by measuring in a scientific manner the number of patients exposed to risk and the number that die within the years that they have been exposed to risk. Dr. Guy has, I judge from his letter, the material from which valuable results could be obtained. I presume he sends out a card or letter yearly to each patient ever treated in the sanatorium. Hence he should be able to add to his data (1) the sex and age of his patients, (2) the class of case at the time when the patient was observed, and (3) *the last date on which the now untraceable patient was heard from and known to be alive.* With this information his data could be made at once available for comparing mortality of sanatorium patients with that of the general population, and also with the like material for non-sanatorium days. If he cares to proceed further in the matter, I shall be only too glad to send him actuarial cards for rapidly entering these facts, which will be simply handed over to a well-known actuary for his independent reduction and opinion. Of course, for proper comparison, every case, slight and severe, that comes into the sanatorium, whether it dies there or later, should be entered and classed.

The same offer is open to Dr. Paget-Tomlinson, although his series is very small. But here I have to draw attention to one or two further points. He writes:

> In speaking of results, I may say that we have given up tabulating very advanced cases, which have occasionally been admitted, a fatal termination being almost invariable; also any cases complicated by some other serious complaint—for example, heart disease.

No such selection can be made if any adequate treatment is to be undertaken. They must be entered as "very advanced" or "complicated." Further, we have now examined a large amount of data from sanatoriums of one kind and another. In all these there are considerable numbers of cases which are *untraceable*, even with the most careful tracking up of patients. Dr. Paget-Tomlinson has no entry at all of untraceable patients. Does this mean that none such have occurred, or have they been excluded from his table? Here, also, the all-important questions of age and sex have been omitted.

Finally, let me draw attention to what seems to me a most important aspect of this matter. Dr. Paget-Tomlinson, on a small sample of patients from which the very advanced cases and, perhaps, the untraceable cases are excluded, finds since 1900 about 20 per cent. of deaths. Dr. John Guy, taking apparently all cases, but excluding the 1908 cases, which Dr. Paget-Tomlinson includes, finds about 32 per cent. of deaths. My own impression is that *both* sets of statistics, if treated by a uniform and genuinely actuarial process, will show practically *identical results* for the true mortality in the various aged groups of those exposed to risk. If this be so, are we to accept Dr. Paget-Tomlinson's view of the "hopeful and satisfactory results of the present 'open-air' methods," or Dr. Guy's view that "the true value of the sanatorium is not curative"? If upon data, which properly reduced, are likely to show exactly the same results, such diverse opinions can be held, does this not indicate that more is needed than is provided here? Do we not want (1) a comparison with the non-tuberculous population of the same ages, and (2) a comparison with the tuberculous population of pre-sanatorium days? The first we know, and it may startle Dr. Paget-Tomlinson to realize that the mortality of his sanatorium tuberculous patients is probably *many* times that of the corresponding age groups in the general population. The second is less well known, but I hope will shortly be discussed as the memoir dealing with it is passing through the press. Meanwhile I would emphasize two points: (*a*) That the question of the value of sanatorium treatment is an open one, and (*b*) that it will only be settled when those interested in the question are willing to submit their data to the only man who can offer a final solution of the problem—the professional and highly trained actuary.—I am, etc., KARL PEARSON.

Biometric Laboratory, University College, London, July 25th.

P.S.—Since the above was printed I have Dr. Paget-Tomlinson's assurance that since the institution was opened no case has been lost sight of—a most creditable record.—August 1st.

SIR,—In connexion with this subject there is one fact regarding which no doubt can possibly exist, and that is the gradually decreasing death-rate from tuberculosis, which has been the feature of recent years. To state, however, that this is due to sanatorium treatment is only

partly true. To be strictly accurate, it is the natural and anticipated result of the broad comprehensive campaign which has been carried on against the ravages of the disease for some years. This campaign includes both curative and prophylactic measures. In addition to the sanatorium treatment of early cases, it embraces improved hygienic conditions in the home, educational measures, the segregation of advanced cases, notification, the suppression of spitting, efforts to provide a pure milk supply, etc. All these measures, and others not mentioned, are collectively responsible for the decreasing death-rate from tuberculosis, but it is obviously impossible to select one of them and correctly assign to it a position of premier importance as a factor in reducing the death-rate.

That the sanatorium is an essential factor in the war against tuberculosis, as at present carried on, none but those possessed of a prejudiced or restricted outlook will deny. In a very considerable percentage of cases, as is shown by *post mortem* records, pulmonary tuberculosis has a marked tendency to heal even under most unadvantageous conditions. If these conservative and healing processes take place under unfavourable conditions it is reasonable to expect that such processes will be more readily induced under the favourable conditions of life which are the feature of the modern sanatorium.

There still exists no little misapprehension as to what sanatorium treatment really is, and regarding the results which the methods adopted really aim at. Some members of the profession, in common with the general public, evidently still regard it as simply a question of the open window and a good meal, and as a means of palliative treatment for all classes of cases irrespective of type, extent, or complication. This, of course, is quite a wrong impression. As a result of the pioneer work done at Frimley by Paterson and Inman, sanatorium treatment in this country has now been placed on a thoroughly scientific and up-to-date basis. It now consists of three important and intelligent steps —first the control of the excessive autoinoculation; secondly, the evoking of an immunizing response by regulated autoinoculation induced by graduated walking exercise and manual labour, and, lastly, the induction of a more permanent response by inoculations with tuberculin or other suitable vaccine.

I am a firm believer in the use of tuberculin as a routine measure in selected sanatorium cases, and am thoroughly in sympathy with Dr. Wilkinson's views, but I regret that, while advocating his scheme, he should depreciate the work done in the sanatorium.

I am sorry to see that my former colleague and old fellow student, Dr. Guy, has fallen upon pessimistic days. His somewhat sombre views appear to be based on a table of figures which he frankly admits are inadequate by reason of the large number of patients (43 per cent.) whose subsequent history he was unable to trace. This is the chief difficulty in collecting reliable statistics of the ultimate results of sanatorium treatment. To keep in touch with a large percentage of ex-sanatorium patients for a period of five years is difficult, and in the case of large institutions which admit patients from a wide or populous area is all but an impossible task. Moreover, to throw light on the true value of sanatorium methods the ultimate results should be tabulated not only in relation to the stage of the disease on admission, but also in relation to the amount of improvement which was evidenced on discharge. Acute and advanced cases may be kept in the sanatorium for months without any appreciable improvement in either the local or general condition. In the majority of such cases a fatal termination is the natural sequence of events. Yet such cases, in which no immediate beneficial result was obtained, are marshalled against the permanence of the immediate beneficial results of sanatorium treatment. Further, to have absolutely trustworthy statistics the causes of death must be investigated. The ex-sanatorium patient is no more immune to attacks by pneumonia, appendicitis, and other intercurrent diseases than is the ordinary individual.

I keep a record of the subsequent history of all patients discharged from the Liverpool Sanatorium, but the records are of too recent a date to be worthy of special note. But after an experience extending over several years I am still a firm believer in the efficacy of the sanatorium régime *plus* tuberculin inoculations in the treatment of suitable cases of pulmonary tuberculosis. I know of no other line of treatment to be compared with it in arresting a tuberculous lesion of the lung with or without tubercle bacilli in the sputum. What is wanted—and urgently wanted—are provision for the segregation of advanced and incurable cases and some comprehensive scheme whereby ex-sanatorium patients may have assistance in becoming proficient in, and obtaining suitable outdoor employment. I am glad to see that the Westmorland Sanatorium is about to open a new block for advanced cases.

In conclusion I may add that I feel sure I voice the opinion of the majority of sanatorium physicians when I say that any statistical evidence which Professor Karl Pearson may bring forward regarding the results of the sanatorium treatment of tuberculosis will be earnestly welcomed by them.—I am, etc.,

Liverpool Sanatorium, July 26th. H. HYSLOP THOMSON.

SIR,—Regarding the influence which sanatorium treatment is exercising on the death-rate from pulmonary tuberculosis, it appears to me that the time has not yet arrived when this factor can be properly estimated; for only a small proportion of cases receive such treatment, and for too short a period. When reasonable sanatorium accommodation has been provided, and the majority of the sufferers undergo treatment, a calculation of the effect on the death-rate can reasonably be made; but I am certain that if every consumptive received sanatorium treatment there would be a remarkable reduction in the mortality. Dr. Guy in your columns again raises the question of the result of treatment in the individual cases, and states his opinion that "the true value of the sanatorium is not curative but educative." Now the value of a sanatorium depends upon the extent to which the physician devotes himself to the work, and if the value of any particular institution be educative rather than curative, we may justly infer that the cases it deals with are too far advanced, that it is understaffed, and the patients do not have the constant supervision which is essential, or that the sanatorium is controlled by a pessimist—for such instances have come under my notice. The psychic influence exerted by the sanatorium physician is of great importance, and if he should cease to look upon his work as mainly curative, that is, as tending towards the patient's recovery, his results will certainly not exceed the ideal at which he aims. I am afraid Dr. Guy is confusing sanatoriums with hospitals for cases beyond the early stage, which have an educative value chiefly; and I desire to point out that the term "sanatorium treatment" should be reserved for "the application to tuberculous patients of all the means which medical science has found to conduce to recovery," and should include all that can be done under the best conditions by physicians who have made a special study of the disease. Dr. Guy remarks that "the curative effects of a residence in these institutions have been unfortunately greatly magnified," but I would point out that the importance of the after-care of the patients has been greatly overlooked, and the majority of the relapses ensue from the sufferer—only partially restored to health by a limited period of treatment—being allowed to return to his old surroundings and occupation, when it would be miraculous if a relapse did not occur. When the importance of the after-care of the individual is realized, the curative effects of treatment will be maintained; but in the meantime, insufficient attention is being paid to it, and hence arise pessimistic utterances.—I am, etc.,

Crieff, July 25th. THOMPSON CAMPBELL, M.D.

THE FUTURE OF THE ASSOCIATION.

SIR,—The rejection of the Draft Charter has been no less regretted by the minority who petitioned for its amendment than by the majority, and they repel with indignation the accusation that they wished to wreck work so hardly accomplished and on which so much money had been spent. They have freely and frequently expressed their gratitude and admiration for the labour and skill expended on it, and only a strict sense of duty, and a sincere conviction that the welfare of the Association was at stake, led them to make and persist in making opposition to certain of its provisions. The influential

position of some of the petitioners, and the overwhelming support received in every case in which the matter was submitted to a vote by Branches, must prove that they represented a far greater number of members all over the country than the actual signatures seemed to show, and the absence of organization, money, and time fully explains the paucity of names adhibited. It is very impolitic, to say the least, for the majority to flout the opinions of an unknown number of members, not only because it will strain the loyalty which is so essential to the smooth working of the affairs of the Association, but because it will have an exceedingly bad effect on the profession outside, which it should be its ambition to attract to its fold. The suppression of the individual vote is the sole cause of our opposition, and is fatal to that confidence which is essential to the security and success of the society. This right of individual franchise is the sum of all our demands, and, as a matter of fact, it has never been argued or voted upon by the Divisions, though in principle it has been admitted in the election of members of Council by the Branches, and more recently and pertinently in the concession of a postal vote to the Colonial Divisions. The State has also admitted the legality and justice of a vote without personal attendance at the polling place in the case of a university election, and most public companies deem it necessary, in order to obtain the confidence of the shareholders and the public, to grant a proxy vote in the event of inability to attend a meeting to decide on important business. For these reasons we considered that it was both just and constitutional to demand that, in important matters, every member of the Association should have free and unfettered opportunity of expressing his opinion, without suffering any disability from having to attend compulsorily a Division meeting. A meeting should, of course, be held, and those who wished could record their votes in person, but sickness, professional duties, distance, or any other impediment should not deprive a member of a voice in the affairs of the Association. When the compromise which would have put an end for ever to our fighting was rejected at Sheffield in 1908, it was on the complaint of Sir V. Horsley that the postal vote was a "new principle," which had not been formally discussed by the Divisions. It was certainly a change as regarded Division voting, but not a "new principle," as I have shown above, in practice; but the obvious remedy—namely, referring it back to the Divisions—was refused by the Chairman ruling my motion out of order to postpone the application for the Draft Charter for that purpose. This policy must be held responsible for the greatly increased opposition which then arose, and culminated in the petition to the Privy Council. It will thus be understood how we have contended, as Mr. Pye-Smith does in his letter to the Journal of July 16th, that "the pace is dangerous." The Association lived under its old constitution for over seventy years, and attained honour and success; it is but in its infancy under the new one, and there are fears that some of its old reputation may be lost by commercialism and a provocative policy. Let us have all the safeguards we can against the encroachments of a spirit which may easily become tyrannical towards those within and militant against those without. At least, let no change of policy be made without thoroughly consulting the members on the widest possible franchise.

The only reasonable objection to a postal vote is that it might lead to an unintelligent decision. That is possible if no time is given for discussion in Division meetings or in the Journal, but really are we justified in insulting the intelligence of our members by holding that they cannot understand a matter without oral explanation? We believe, on the other hand, that an opinion can be as well formed from reading as from hearing a matter discussed, and that the decision will be even sounder and more unfettered. This was strikingly exemplified in the voting at the 1907 Referendum when over one hundred Divisions voted unanimously for or against the same set of questions. This almost ludicrous unanimity could have no other explanation than that the members were swayed by the personality of one or two men, or the special manner in which the case was presented. Besides, the same Referendum revealed the inherent weakness of the Division system, when, though the occasion was so important, only a tenth of the members could be got together, and many Divisions failed to meet at all. This is the foundation on which the so called Representative Body is based, and we consider it too precarious to warrant it taking up revolutionary or speculative schemes.

The postal vote on all important matters was the core of our demand, and the other amendments were meant to make it effective. The composition and independence of the Central Council was insisted upon for this object. But why depend on the intervention of the Council? What is to prevent important business, especially affecting finance, from being automatically referred to the members, as in the case of public companies? The definition of subjects for submission to a postal vote should not surpass the powers of our legal advisers, and, if they hinged chiefly on finance, might be agreed to without much difficulty. If this were done the question of the Council need vex us no more, and that body could be made in name, what it is now in fact, an advisory and executive committee of the Representative Body.

Though I have no mandate from the dissenting members, I am sure I am not wrong when I believe they would accept this solution of the matter. They are sick of hostilities which bring them into sharp conflict with those whom they respect so highly and would gladly work in harmony with. The prospect of further conflict is not to their taste, but, if need be, will be faced unflinchingly. They recognize how hurtful it is to the Association to continue internal warfare, and therefore both their inclination and interest is enlisted on the side of peace.

The question of cost in taking a postal vote need not stand in the way, as it would not exceed greatly the expense of issuing the billet for an ordinary meeting, and, if the Division Secretary were entrusted with the reception and collation of the replies, the central office would be relieved of that duty. The members need not grudge the cost of a halfpenny stamp for returning the voting paper for the privilege of expressing their opinion without attending the Division meeting.—I am, etc.,

Edinburgh, July 18th. A. Walker.

Sir,—In his Presidential address to the Metropolitan Counties Branch, published in your issue of July 16th, Dr. Lauriston Shaw remarks that many men outside the Association distrust its methods and decline its membership. He has in mind, no doubt, the lamentable fact that the Association has practically ceased to grow within the United Kingdom. Yet he need feel no surprise at this; for he himself has supplied the explanation. To this explanation I would draw the attention of your readers, and I hope that every one interested in the future of the profession will read and ponder it.

Dr. Shaw says:

> What are the essential features of the organization through which the aspirations of a united profession may have a reasonable chance of being realized?
>
> In the first place, it must be an entirely voluntary organization. . . .
>
> It must have an entirely democratic constitution. In these days of universal liberty it is useless to expect the members of any profession to submit to the control of an authority in the selection of which they have no voice. But far more important than this, it is impossible to secure the intelligent interest of a member in questions of professional policy and action unless he is given an equal opportunity with his colleagues of framing such policy and dictating such action. Granted these primary features of voluntaryism and a democratic constitution, without which success is impossible, the actual measure of success will depend on details of organization. The more perfect the mechanism for discovering the real wishes of the members and the closer the touch between the executive and the electorate, the greater will be the loyalty and discipline of the members upon which in a last resort all progress will depend.

Weighty words these! How do they accord with the policy which has just cost the Association its Charter?

So far from endeavouring to realize a true medical democracy—from giving to every member, however busy, however isolated, his fair share in the determination of its policy—those who are responsible for the loss of the Charter have strained every nerve to disfranchise the great majority of the Association and to set up, not a democracy, but an irremovable oligarchy.

Many of us who desire a real medical democracy, have urged that the Referendum, which is the sole method of appeal from the decisions of the Representative Body, a

single-chamber government by no means democratic in its mode of election, shall be:

(1) Taken by post to every member,
(2) Reasonably easily obtained, and
(3) Secured by a guarantee of continuance.

To any fair-minded body such proposals should have instantly commended themselves. I understand they so commended themselves to His Majesty's Privy Council. Yet they were strenuously opposed by the government of the Association, even to the point of sacrificing the Charter rather than conceding them.

With such facts before the profession, Dr. Shaw need feel no astonishment that the outside medical public is looking askance at the Association. For it is idle to imagine that a profession of highly educated men, "in these days of universal liberty" (to quote Dr. Shaw's excellent phrase) will voluntarily submit itself to the authority of any single chamber, from whose decisions no appeal is, under any circumstances, possible, and whose mode of election inevitably disfranchises a large majority of the electorate, men to whom exigeant duty in town and country makes attendance at meetings impossible. If medical men are to continue to interest themselves in the doings of the Association, and if its growth in these Islands is to recommence and to go forward, there must be allowed, in the new constitution, an effective appeal from the decisions of the Representative Body, so arranged as to give an equal vote for equal subscription to everyone, that is to say, a postal vote, and so ordered as to be both reasonably easily obtainable and safeguarded by a guarantee of continuance, in other words, on the vote of a simple majority of the Council with its ordinary quorum, or, with equal right, on the demand of any five or more Branches or Divisions (or Branches and Divisions) having a collective membership of not less than 10 per cent. of the Association.

These were the proposals which the present government of the Association elected to lose the Charter rather than accept. Yet what fair-minded person can find the smallest objection to them? It is impossible to frame demands more moderate. Reasonable checks on legislation are obnoxious only to despotism in one or other of its multifarious forms. But it will be found in the long run impossible with success to resist these reasonable requirements. For it needs no mantle of prophecy to enable one to predict, in the event of the persistence of the present shortsighted opposition to them, the approaching *débâcle* of the British Medical Association. If that should occur, the responsibility of its authors will be far heavier than the responsibility for the loss of the prestige which the possession of the Charter should have given us.

But I am told that saner counsels seem at last to be asserting themselves. Let us hope that this may prove to be the case. To a wisely governed and unquestionable democracy of medicine much should be possible. To traditions of altruism unique amongst human occupations, in view of the vast fields of usefulness opened to it by the labours of a century of research, the medical profession of this empire at the present time unites a singular nobility of aim and width of outlook. Its completed organization, when it comes, should be an unexampled instrument of good. May our Association be permitted to gain the honour to which its history entitles it, of building up such an organization. May no fault of leadership, no lack of the political sense, cause it to fall short of its own supremacy of attainment.—I am, etc.,

Exeter, July 17th. W. GORDON.

THE RECENT SPECIAL REPRESENTATIVE MEETING AND SPECIAL GENERAL MEETING.

SIR,—The letter by Dr. A. G. Bateman in your issue of July 16th goes to the root of the matter. Do the members of this Association wish it to be run as a business company or as a medical association? If the latter is the general wish, why waste further money? Much has been already lost in striving after what we could not get, and which if we got we could not really use. Let us remain an association of medical men, honestly striving to do our best to relieve sickness, content with the feeling of satisfaction that must come to all who know they have done their duty.—I am, etc.,

Paignton, July 16th. GRIFFITH C. WILKIN.

EPIGASTRIC PAIN AS A COMPLICATION OF MUMPS.

SIR,—I venture to draw Dr. Godfrey's attention to papers by Dr. Wilfred Edgecombe,[1] Dr. J. Gordon Sharp,[2] and Dr. J. K. Sen.[3] He will find recorded in these papers evidence that to my mind prove that now and then the pancreas is acutely inflamed in the course of an attack of mumps. The symptoms of this complication may be severe, even alarming; but the termination is nearly always in recovery, so that in most cases the prognosis is favourable.—I am, etc.,

London, N.E., July 25th. E. W. GOODALL.

SIR,—I was interested to read Dr. Godfrey's note on epigastric pain in mumps, as this symptom was present in myself during an attack two years ago.

Whilst his suggestion of pancreatic metastasis is good, there is another factor which, I think, should be taken into account. I have for some time been struck by the frequency of epigastric and right hypochondriac pain in young persons who for any cause—for example, adenoids—suffer from "dry mouth," and the conclusion I arrived at from further investigation of one or two cases was as follows: During sleep colonies of organisms grow upon the dry tongue, such organisms being capable of producing acid from sugars. They are subsequently swallowed, and the resulting fermentation of the carbohydrates of the food forms a highly irritating material in the stomach. The immediate result, in some cases at least, is an acute pylorospasm, the pain of which may become so severe as to simulate gall stones. The pain usually commences soon after breakfast, lessens slightly towards midday, but after luncheon may become intolerable. I have in my mind a case in which the symptoms continued periodically for years. The physical examination was always negative except for slight dilatation during the attacks, and also some tenderness over the pylorus. Never was there haematemesis or melaena. Medication with calomel, bismuth, etc., was of little use, but the distress was at once relieved by lavage, when the stomach contents were found to be acid and offensive. The condition was cured, and recurrence prevented by an antiseptic mouth wash night and morning and by correcting the habit of nocturnal mouth breathing. There were in this case no carious teeth unfilled. It is worth noting that an excess of saccharine foodstuffs greatly aggravated the symptoms and induced attacks with great precision, but was not essential to their occurrence.

The above experiences make me wonder if Dr. Godfrey's cases were due to the specific organism of mumps or to secondary organisms taking advantage of the condition of "dry mouth."—I am, etc.,

Coldash, Newbury, July 23rd. CECIL E. REYNOLDS.

SIR,—I was much interested in reading the letter of Dr. Godfrey, of Melbourne, in your issue of July 23rd, on epigastric pain as a complication of mumps.

For some years past I have been seeing many of these cases in which the occurrence of vomiting and abdominal pain, with perhaps high temperature, just as the swelling of the salivary glands was subsiding, led one to the unfulfilled expectation that orchitis was impending.

In December last, at this school, out of some twenty cases of mumps, at least ten followed this course, and as they showed marked tenderness to pressure over the pancreas, I came to the same conclusion as your correspondent, namely, that they were due to a true metastasis to that organ.

My experience of mumps dates back now nearly twenty-five years, and I am strongly of opinion that it is only in the latter part of this period that I have seen such cases as these, and that they belong to a variety of mumps which is indeed of recent development.—I am, etc.,

Marlborough College, July 25th. EDWARD PENNY, M.D.

SIR,—An observation similar to those of Dr. H. P. Godfrey, described in the JOURNAL of July 23rd, may be worth recording. A boy of 10 years, recovering from

[1] *Practitioner*, February, 1908.
[2] *Lancet*, January 16th, 1909.
[3] *Indian Medical Gazette*, March, 1909.

a mild attack of mumps, became rather suddenly ill on the fifth day. The temperature rose to 103°, with headache, epigastric pain, nausea, and (once) sickness. A deep-seated swelling was felt in the epigastric region. The symptoms, treated by hot applications, subsided in three days. There was no sugar in the urine.—I am, etc.,

London, July 27th. R. FORTESCUE FOX, M.D., M.R.C.P.

AN EFFICIENT AMBULANCE SERVICE FOR LONDON.

SIR,—On October 20th, 1909, the Royal Assent was given to an Act to enable the London County Council to establish and maintain an ambulance service in London. The Council had sought similar powers for providing a rapid ambulance service, summonable by telephone, for cases of accident or illness occurring in the streets or public places in 1906, but these powers, though approved by the Commons, were rejected by the Lords. Since 1907 the City Corporation has adopted a similar system within the area of its jurisdiction, and has demonstrated its complete efficiency in the matter both of the ease and the celerity with which the sufferers are transported to hospital in an electromobile ambulance. I cannot learn that any steps have as yet been taken by the London County Council to confer a similar boon on London outside the City in accordance with the powers of the new Act.

That the need for such service is great and urgent is proved by the report of the Departmental Committee of the Home Office of last year, wherein it was shown that 60 per cent. of all cases of injured or sick persons conveyed to hospital in London are transported otherwise than by ambulance or litter, that in more than one-fourth of the cases fault is found with the prejudicial character of the means of conveyance, while the unsuitable cab is still largely utilized, and actual harm is in one out of three of the more serious cases attributed to its use.

The Committee also drew attention to the fact that the number of accidents occurring in the streets of London had increased by no less than 62 per cent. in the three preceding years. The total figures for last year are, I believe, not yet available, but in a return published last week, which gives the street accidents caused by vehicles alone, and which were known to the police, I find that within the metropolitan district there were, in 1909, 12,018 cases, of which 287 were fatal.

The Home Secretary recently, in answer to a question, informed me that he would be willing to sanction any practicable arrangement for the co-operation of the metropolitan police in carrying out an improved ambulance service. When the new County Council was elected in the spring of this year, the opinion of all the candidates was sought on the question of putting into operation the Council's newly-acquired powers, and a considerable majority of the present Council, irrespective of party, have expressed themselves in favour of the Council providing such service.

Now that the necessary statutory powers are available, there is no longer any excuse for denying to the County of London this necessary municipal service, in which it is notoriously deficient in comparison with the City and our large provincial towns.

You, Sir, have on several occasions advocated this beneficent reform, and I again invoke your aid in bringing the matter before the public.—I am, etc.,

London, W., July 20th. W. J. COLLINS.

ON THE PRESENCE OF SUGAR IN HEALTHY URINE AS A SOURCE OF THE OSAZONE REACTION.

SIR,—Your issue of July 30th contains a letter from Dr. Cammidge purporting to be an answer to ours inserted in the JOURNAL of the previous week. In our letter we referred to the universally admitted fact that sugar is present in the blood, and argued thereupon that, in conformity with what is observed to constitute the existing order of things, it must also be present in the urine. To this Dr. Cammidge has given a reply which fails in any direct manner to touch the basis of our argument, and has given instead a purely speculative dissertation on metabolism, into which we must decline to follow him. We complain of his method of controversy in this respect, and we have, further, to complain of the incorrect representation he has given in misquoting us with respect to glycuronic acid. He says: "I cannot agree with Drs. Pavy and Bywaters that glycuronic acid in the urine 'is an incidental ingredient, outside the question that is being discussed.'" We said nothing of this kind in our letter. After referring to the question of the existence of glycuronic acid in normal urine, we stated that, if considered to exist, it was looked upon by authoritative observers as only present to a minute extent. We then remarked: "Its presence as an incidental ingredient is outside the question that is being considered." It is within the range of common knowledge that the incidental presence of glycuronic acid in urine follows the ingestion of a number of agents of a drug character, and it is to this that our statement clearly applied. By omitting the word "as," which is a governing word in the sentence, and altering, as has been done, the position of the verb, an altered sense is given to the passage.—We are, etc.,

F. W. PAVY,

London, W., August 2nd. H. W. BYWATERS.

SHIP SURGEONS.

SIR,—I was very pleased to read Dr. Hadfield's contribution to the literature on the above subject in last week's issue, but I hasten to correct a misapprehension which apparently exists in his mind concerning the proposed organization of ship surgeons.

In my letter to the JOURNAL of July 9th I explained how the formation of a subcommittee came to be suggested by the Medico-Political Committee of the British Medical Association, and that, as a preliminary step, it was agreed that two others with myself should act as a provisional committee. I may say that even this preliminary stage was not arrived at without a good deal of "spade work." Some three years ago Dr. Sharpe endeavoured to form an association of British ship surgeons, and a meeting was held in London with a view to considering the question. The attempt, however, proved abortive. Since that time others, including myself, have been actively engaged in the same direction, for, as Dr. Hadfield himself acknowledges, the time is ripe for reform, and the tone of many of the replies received indicates that the movement has not been started too soon. We fully understand that the matter will require the greatest care and tact in its handling, and that there will be no "fuss or friction." The Medico-Political Committee may, I think, be safely trusted to see that "a more or less unrepresentative committee" will not "attack the shipping companies."

The letter which is the subject of Dr. Hadfield's remarks was in no sense a "manifesto," but was published with the full knowledge and consent of the Medico-Political Committee, under whose auspices the organization will be formed and directed.

I quite agree with Dr. Hadfield that the ship does not exist for the surgeon any more than it does for the benefit of the cook. The ship is run in the interest of the owners, and it would frequently be a matter of very great advantage to them if the surgeon was selected with a little more care.

Surely Dr. Hadfield will acknowledge that if we can accomplish a reform in a constitutional manner it will be in the interests of the public, the shipping companies, and the profession. I do not think, however, that any one with this object at heart could hope for a satisfactory result from the method suggested by your correspondent—namely, "the thin end of the wedge of improvement, inserted by private effort"; the profession, ashore and afloat, is too deeply concerned to allow the problem to be solved in this irresponsible manner. I can answer for it, we are not a "warlike committee," and there need be no fear of our "offending the susceptibilities of the shipping companies."

Dr. Hadfield acknowledges that a sea surgeon, with his multifarious duties, should be in his way a specialist, and further states that by comparison with the royal navy medical work in the mercantile marine is far harder and of a more responsible nature, and that "a ship with a crew of 400 or 500 and carrying between 1,000 and 3,000 passengers engaged in a week's voyage to America or a six weeks' journey to Australia obviously forms a large practice for a medical man." Surely he will further acknowledge that it is not out of the way, under such circumstances as

these, to expect a company to provide facilities for the performance of surgical operations, the mention of which is one of the things your correspondent objects to in my letter, and I certainly think that it is only common humanity to endeavour to secure proper hospital accommodation for crew and passengers.

I can assure Dr. Hadfield that the members of the provisional subcommittee are all men of practical experience; two are writers of books dealing with sea practice, and one at least can claim an equal distinction with Dr. Hadfield, having been commodore surgeon of one of the largest steamship lines. I trust further criticism will result from our action, and that the question will be fully ventilated in the columns of the JOURNAL—with the Editor's kind permission.—I am, etc.,

Rostrevor, co. Down, Aug. 1st. JOHN F. ELLIOTT.

A DEFINITION OF INFLAMMATION.

SIR,—With all due deference to the authority of Professor Rushton Parker, may I suggest that Burdon-Sanderson's definition of inflammation is not a sound one? Aristotle laid it down as a principle that a definition should be both inclusive and exclusive. Apply this test to the following cases:

If I knock my hand and that part swells, is this of necessity inflammation?

If I knock my head against a brick wall and a sarcoma develops, is this inflammation?

If Professor Rushton Parker performs an operation and the part heals by first intention (as I am sure it would under his skilful hands), is this inflammation?

Yet in all these instances there is a "local reaction to an irritant."—I am, etc.,

London, W., July 25th. KENNETH CAMPBELL.

SIR,—The recent discussion in the BRITISH MEDICAL JOURNAL induces me to put before its readers a short consideration of the question.

A comparative study of the healing process shows that it is a property of all living organisms and as widespread as the phenomena of life. This fact has led to the extension of the word "inflammation" and to its application to such highly specific reactions as gall formations far beyond the idea suggested by the derivation of the word.[1]

In its simplest expression the reaction of a living tissue to an injury consists in activity of the fixed cells capable of reaction. This is seen in wounds of vegetables, but, when we come to animals, the presence of a mesoderm and body cavity adds an additional factor—namely, the presence of wandering cells; and as we follow this still simple process upwards in the scale of animal life, we reach that highly complicated condition which has been clinically recognized as inflammation, the classical characteristics of which are redness, swelling, heat, and pain. In this condition the vascular system, the representative of the mesoderm and primitive body cavity plays such a predominant part that the reactions of the fixed cells are difficult to follow.

Would it not be possible to embody these scientific and clinical facts in some such definition as this:

Inflammation is that portion of the reaction to injury of higher animals which concerns the vascular system characterized by redness, swelling, heat, and pain, such injury being insufficient to cause death?—I am, etc.,

Sevenoaks, July 25th. JAMES E. BLOMFIELD, M.D.

MATRICULATION AT THE LONDON UNIVERSITY.

SIR,—It is quite refreshing to see the letter of "M.D. Lond.," in the BRITISH MEDICAL JOURNAL of July 16th upon the questions set at the London University Matriculation. It ought, I think, to be more widely known which examinations could be taken in lieu of the matriculation in question. Oxford, Cambridge, and Dublin entrance examinations I have always understood are accepted by London.

For an examiner to be allowed to set schoolboys' questions which the average well-educated man of the world could not answer, seems to me to expose a fault in the university administration requiring a speedy remedy.

No wonder the London medical student avoids the London University, though the hospitals, I venture to state, provide the finest material in the British Isles—possibly in the world—but students go to the provincial universities to acquire a degree.

What is the average number of London M.D.'s on the staff of the London hospitals? I may be very ignorant of facts, but is it 10 per cent.?

I know many M.D.'s of this university at the present time—very able men too—wasting their lives in attending to club patients, a portion of whose modest contribution only falls to the doctor.

In this so-called higher education required for such work?

The directors of the London University ought to welcome the Royal Commission now sitting, as an impartial assembly is more likely to point out the faults, and possibly be the means of bringing the university more abreast with the times.—I am, etc.,

July 26th. A GRADUATE OF ANOTHER UNIVERSITY.

THE DANGERS OF HYPNOTISM.

SIR,—I am very much obliged to Sir Henry Morris for citing authorities in support of his remarks on the so-called "dangers of hypnotism." I was afraid I should be referred to Charcot and his following; but I was under the impression that the fallacies of this school had been exposed some time since, and that the experiments and teaching at Nancy and the work and investigations of Dr. Milne Bramwell, Albert Moll, and a large number of leading medical hypnotists and suggestionists had entirely discredited the theories and conclusions of the Salpêtrière.

However, the concluding sentence in Sir Henry's letter, I think, fairly states my case—namely, "hypnotism may be too dangerous for general use in medical practice, even if in the hands of those specially skilled and experienced the risks are not unduly great, or only very slight." Surely this view indicates that the practice of hypnotic suggestion is a legitimate and desirable therapeutic method if its results can be shown to be good enough. Of course there must be the *savoir faire*, the study of theory, the observation of cases and of the methods and practice of competent teachers.

I do not suggest that any medical practitioner can calmly sit down and proceed to hypnotize with impunity all and sundry according to some stereotyped method he has read in a book. On the contrary, most medical men will readily admit that they know nothing about the subject—and therefore they are dead against it! Such an one, being unversed and ill-equipped, might easily be potential for danger, and the hypnotic process would incur the blame instead of the operator and his *modus operandi*. If one places the administration of anaesthetics in the hands of the incompetent, or leaves the performance of major (and some minor) surgical operations to the unpractised, one must expect dangers to arise, where with the properly trained and skilled anaesthetist or operator such dangers can scarcely be said to exist or are infinitely small.

It would seem, indeed, that the dangers of hypnosis have been greatly exaggerated, while the results of this form of treatment in a vast number of remarkable cases have hardly received sufficiently wide recognition. Apart from the literature of the subject, even one's own quite limited practical experience has been most encouraging in the treatment by hypnotic suggestion of such intractable and deadly cases as drink and drug manias—cases which so often drift into the hands of the quack and the charlatan, if, indeed, they apply for treatment at all. The "dangers" of hypnotism are not worth a thought considered in the light of the results that are obtained by the treatment and the chances of success offered to the patient when all ordinary and orthodox measures have failed. For one must not forget that presumably the so-called danger zone is only reached in the deeper stages of hypnosis and in somnambulism, and possibly in certain cases where the hypnotic state has been induced repeatedly for one reason or another; but the vast majority of persons for whom treatment is undertaken never attain those deeper stages, and neither is it necessary for the end in view that they should.

One knows that only the lighter degrees of hypnotic

[1] *The Inflammation Idea in General Pathology.* W. H. Ransom.

influence are essential, in a very large proportion of cases, for successful results; and in a considerable proportion also, suggestion alone, with the patient in a relaxed, passive, receptive condition, is sufficient to secure success. In any event, those cases for which the deepest influence possible is desirable, as well as those requiring a large number of séances (and here it is to be presumed the "danger" may arise), are precisely those cases in which life has become, or will become, desperate and burdensome, and any treatment is worth any risk.

Sir Henry Morris quotes M. Richet as noting "troublesome nausea and marked nervous irritability lasting twenty-four hours after awakening from the hypnotic condition"; also some other writer recording "intense fatigue in the limbs for several hours after hypnosis." Are we to regard such phenomena as "dangers" and condemn hypnotic treatment thereby? If so, surely chloroform narcosis might meet with an equal degree of condemnation.

As regards the case of the woman who acquires a passion for the physician who hypnotizes her, I doubt if hypnotic aid is essential to such an one, who is equally likely to succumb to the physician who carries with him a strong personality and a particular kind of atmosphere that appeals to the lady in question.

This matter, Sir, of the "dangers of hypnotism" is a very interesting and important one, and is no doubt a dominant factor in the prejudice and distrust existing in the minds of the laity and many members of the profession towards hypnotic suggestion as a therapeutic method. After all, we have to ask ourselves two questions: (1) Do we know the conditions under which danger is likely to arise? (2) Can we remove the conditions and so avert the danger? I venture to think the answer is in the affirmative.—I am, etc,

London, W., July 19th. STANLEY NOBLE, M.D.Brux.

The Services.

Examination for Promotion.

The following candidates were successful at the May examination B and D of Officers of the Territorial Force for Promotion:

For Promotion to the Rank of Lieutenant-Colonel (D 1, Medical Organization of the Territorial Force; D 2, Sanitation and Epidemiology; D 3, Laws and Customs of War on Land).—The undermentioned officers of the Royal Army Medical Corps (Territorial Force), qualified in D, passed in D 1, 2, and 3: Major T. FORREST, M.B., attached to the 7th Battalion Scottish Rifles; Major (Honorary Surgeon Lieutenant-Colonel) H. T. CHALLIS, M.D., 3rd East Anglian Field Ambulance; Lieutenant-Colonel R. T. HALLIDAY, M.B., and Major H. W. THOMSON, M.B., Lowland Mounted Brigade Field Ambulance; Major S. J. J. KIRBY, M.D., 2nd East Anglian Field Ambulance; Major T. STEVENSON, M.B., 2nd West Lancashire Field Ambulance; Major J. MCKIE, M.B., 2nd Lowland Field Ambulance; Major H. H. C. DENT, M.B., F.R.C.S., 3rd North Midland Field Ambulance. Passed in D 1, 2, and 3, qualified in B, and passed in B 1 and 2 under the old regulations: Major W. K. CLAYTON, Yorkshire Mounted Brigade Field Ambulance. Passed in D 1, qualified in D, and already passed in D 2 and 3; Major G. A. EDSELL, M.D., 3rd Home Counties Field Ambulance; and Major W. B. COCKILL, M.D., 3rd West Lancashire Field Ambulance.

For Promotion to the Rank of Captain (B 2, Military Law; B 3, Organization, Administration, and Equipment; B 15, Sanitation).—The following passed in B 2, 3, and 15, qualified in B.—Lieutenant A. ROBERTSON, attached to the Ayrshire Yeomanry; Lieutenant J. C. S. BURKITT, M.D., attached to the Leicestershire Yeomanry; Lieutenants G. E. J. A. ROBINSON, M.D., and C. H. ALLEN, M.B., F.R.C.S., attached to the Nottinghamshire Battery, Royal Horse Artillery; Lieutenant F. W. B. YOUNG, M.B., attached to the 4th West Lancashire (Howitzer) Brigade, Royal Field Artillery; Lieutenant R. BRUCE, M.B., attached to the 3rd Lowland Brigade, Royal Field Artillery; Lieutenant T. H. RICHMOND, M.B., attached to the 2nd North Midland Brigade, Royal Field Artillery; Captain A. H. W. HUNT, attached to the 3rd North Midland Brigade, Royal Field Artillery; Lieutenants W. ST. A. ST. JOHN and F. L. A. GREAVES, F.R.C.S., attached to the 4th North Midland (Howitzer) Brigade, Royal Field Artillery; Lieutenant S. MACLEAN, M.B., attached to the 3rd Wessex Brigade, Royal Field Artillery; Lieutenant C. J. I. KRUMBHOLZ, M.B., attached to the 7th Battalion Royal Warwickshire Regiment; Lieutenant K. S. STORRS, M.B., attached to the 5th Battalion Essex Regiment; Lieutenant A. H. NORRIS, attached to the 6th Battalion Manchester Regiment; Lieutenant W. S. PATERSON, M.B., attached to the 6th Battalion Highland Light Infantry; Lieutenant E. N. THRELFALL, M.D., attached to the Northern Cyclist Battalion: Lieutenant T. H. LIVINGSTONE, M.D., F.R.C.S., attached to the Northumbrian Divisional Company, Army Service Corps; Lieutenants A. AVENT and A. C. GOODWIN, M.B., F.R.C.S., North Midland Mounted Brigade Field Ambulance; Lieutenant A. B. DUNNE, Notts and Derby Mounted Brigade Field Ambulance; Lieutenant J. C. BURTON, 1st South-Western Mounted Brigade Field Ambulance; Captain A. G. HAMILTON, Welsh Border Mounted Brigade Field Ambulance; Lieutenants F. J. REES, J. R. POOLER, M.B., and J. TURTLE, 3rd East Anglian Field Ambulance; Lieutenant A. T. FALWASSER, 1st Home Counties Field Ambulance; Lieutenant J. DUNDAS, M.B., 2nd Home Counties Field Ambulance; Lieutenant F. W. K. TOUGH, F.R.C.S., 1st West Lancashire Field Ambulance; Lieutenant O. H. WILLIAMS, M.D., 2nd West Lancashire Field Ambulance; Lieutenants A. A. W. MERRICK, F.R.C.S., E. KNIGHT, M.B., and N. S. JEFFREY, M.B., 3rd West Lancashire Field Ambulance; Lieutenant S. F. ST. STEADMAN, 5th London Field Ambulance; Lieutenant T. A. BARRON, 1st North Midland Field Ambulance; Lieutenants J. R. PLANT and R. K. HAMILTON, 2nd North Midland Field Ambulance; Lieutenant P. W. TURNOR, 3rd North Midland Field Ambulance; Lieutenant A. COLERIDGE, M.B., 3rd South Midland Field Ambulance; Lieutenants J. M. GOVER, J. P. MILNE, and A. G. DUNN, M.B., 1st Northumbrian Field Ambulance; Lieutenant F. DARLOW, M.B., 1st West Riding Field Ambulance; Lieutenants J. W. STOKES, E. F. FINCH, C. G. MURRAY, and J. MACKINNON, 3rd West Riding Field Ambulance; Lieutenants T. DUNCAN, M.B., G. P. D. HAWKER, and J. MILLER, 1st Wessex Field Ambulance; Lieutenant A. J. MARTIN, 2nd London Sanitary Company. Passed in B 2, 3, and 15: Lieutenant W. SIMPSON, 1st Northumbrian Field Ambulance.

Public Health
AND
POOR LAW MEDICAL SERVICES.

METROPOLITAN ASYLUMS BOARD.

Scarlet Fever.

AT the meeting of the Metropolitan Asylums Board on Saturday, July 30th, the following letter was read from the Local Government Board under date July 16th:

"I am directed by the Local Government Board to advert to your letter of April 13th last, with reference to the suggestion of the managers of the Metropolitan Asylum District that the Board should institute an inquiry into the causes of the continued prevalence of scarlet fever. In reply, I am directed to state that this subject has been receiving the careful attention of the Board for a considerable time, and that during the last two years scientific workers have been engaged on their behalf in bacteriological investigation of this disease. Pending the discovery of exact methods of diagnosing the presence of the disease by bacteriological means, the Board have instituted inquiries with regard to enteric fever and diphtheria, the germs of which are recognizable. The Board are advised that in both of these diseases protracted and recurrent infection occasionally continues in patients who, so far as can be judged by ordinary medical examination, have completely recovered, just as these phenomena occur in scarlet fever, and it is hoped that the inquiries made into these two diseases will throw much light on the point in its relation to scarlet fever. As stated in answer to a question addressed to the President in the House of Commons on August 25th last, the Medical Officer of the Board will, as soon as his other engagements permit, prepare a memorandum on the subject of administrative means for the prevention of the spread of the disease, and it is hoped that such memorandum may be useful to sanitary authorities in co-ordinating their measures for this purpose. The Board may add that in judging the merits of different methods of treating scarlet fever they will be guided to a considerable extent by the experiences of the managers of the Metropolitan Asylum District. The Board have noted with much interest the accounts contained in the annual reports of the managers of experimental trials already made in the managers' hospitals as to the possibility of treating more than one disease under conditions other than those usually fulfilled. They trust that further exact reports will be made on this and allied subjects, in order that this Board may be in a better position to decide, on the basis of exactly observed experience, as to the utility and the limits of such utility of the methods alluded to above."

ANTI-PARASITE.—The usual method of cleansing a bug-infested room is to spray the walls, ceiling, and floor with a liquid disinfectant and then to introduce sulphur fumes. If this is not effectual it is probably due to the fact that the vermin are lurking in cracks of the wall, etc. A strong liquid disinfectant should be introduced through a syringe into any of such likely hiding places.

QUERY.—If a medical man certifies under the Infectious Disease (Notification) Acts that a patient is suffering from scarlet fever, it would be most improper that his certificate should be commented upon at a meeting of the sanitary authority concerned, and it would be outrageous that the comments should take the form of questioning the diagnosis of the certifier.

IN a recent report to his Government the American Consul-General at Dresden states that the number of medical practitioners has increased out of all proportion to the increase in the population in many parts of Germany. The percentage increase in population and physicians from 1883 to 1903 was as follows: Province of Brandenburg, population 55 per cent., doctors 302 per cent.; Posen, population 17 per cent., doctors 106 per cent.; Berlin, population 69 per cent., doctors 153 per cent. The following shows the number of the population to each physician: Berlin, 776; Posen, 3,246; West Prussia, 3,102; Reuss, 3,725.

Universities and Colleges.

UNIVERSITY OF LONDON.

EXTRAORDINARY MEETINGS OF THE SENATE.

EXTRAORDINARY meetings of the Senate were held on June 30th and July 20th.

Deputation to the Chancellor of the Exchequer.

It was resolved that a deputation should wait upon the Chancellor of the Exchequer to urge the consolidation of the assistance received from the State by universities and university colleges.

The deputation subsequently waited on the Chancellor of the Exchequer, who was accompanied by the President of the Board of Education. The object of the deputation having been stated, Mr. Runciman, in reply, expressed his sympathy and his realization of the importance of giving to universities and university colleges a considerable amount of freedom in instruction, and promised that the matter should receive very careful attention. The Chancellor of the Exchequer expressed his concurrence with the reply of Mr. Runciman.

Imperial College of Science and Technology.

At the meeting on July 20th it was resolved:

That the Senate, while prepared to acquiesce in an increase of their number if necessitated by the incorporation of the Imperial College of Science and Technology in the University, record their objection to any scheme of reconstitution which would involve the creation of a large Senate with a small Executive Council, as set forth in Report A, as forwarded by the Academic Council to the Senate (Report of the Academic Council for Transmission to the Royal Commission on University Education in London, pages 32 to 42).

East London College.

The period for which the East London College was admitted as a school of the University in the Faculties of Arts, Science, and Engineering has been extended for a further period of five years.

Election of Chairmen of Committees.

The following have been appointed Chairmen of the Committees:—*Council of External Students:* Dr. S. Russell Wells; *Brown Animal Sanatory Institution Committee:* Sir William Church, Bart.; *Committee of Medical Members:* Dr. Frederick Taylor.

Appointment of Representatives.

The following appointments have been made:—

Dr. H. G. Cook as representative on the court of governors of the University College of South Wales and Monmouthshire.

Dr. E. G. Graham Little as member of the committee of the Chelsea Physic Garden.

Professor A. W. Crossley, F.R.S., as a member of the committee of management of St. Thomas's Hospital Medical School.

Dr. A. D. Waller, F.R.S., as representative of the University at the second International Congress on Alimentary Hygiene at Brussels in October, 1910.

Advanced Lectures in Physiology.

The following scheme of advanced lectures in physiology for the session 1910–1911 has been approved.

I.—*At the Physiological Laboratory of the University.*

1. Mr. Major Greenwood, jun., eight lectures on quantitative methods of studying physiological and pathological variations, on Tuesdays, at 5 p.m., October to December, 1910.
2. Mr. H. E. Armstrong, F.R.S. and Dr. E. F. Armstrong, on hydrolysis and enzyme action, eight lectures, on Tuesdays, at 5 p.m., January to March, 1911.
3. Dr. G. A. Buckmaster and Mr. J. A. Gardner, on gaseous exchanges taking place in the blood, eight lectures, on Tuesdays, at 5 p.m., May to June, 1911.

II.—*At University College.*

4. Dr. C. S. Sherrington, F.R.S., on reflex action, eight lectures, during the first term (Page May Memorial Lectures).
5. Dr. H. H. Dale, on physiological significance of amines, eight lectures, on Fridays, at 4 30 p.m., January to March, 1911.
6. Dr. W. M. Bayliss, F.R.S., on mechanism of oxidation, eight lectures, on Fridays, at 4.30 p.m., May to June, 1911.

III.—*At King's College.*

7. Mr. Joseph Barcroft, F.R.S., on tissue respiration, four lectures, on Mondays, at 4.30 p.m., October to November, 1910.
8. Dr. Otto Rosenheim, on recent progress in physiological chemistry, four lectures, on Mondays, at 4.30 p.m., January to February, 1911.
9. Dr. T. G. Brodie, F.R.S., on physiology of the kidney, eight lectures, on Mondays, at 4.30 p.m., May to June, 1911.

IV.—*At Guy's Hospital.*

10. Mr. J. H. Ryffel, on the intermediate products of metabolism, eight lectures, on Thursdays, at 4 p.m., October to December, 1910.
11. Dr. M. S. Pembrey, on the physiology of the embryo and the newly born, eight lectures, on Thursdays, at 4 p.m., January to March, 1911.
12. Dr. J. S. Haldane, F.R.S., on the secretion of urine, four lectures, on Thursdays, at 4 p.m., in May, 1911.
13. Dr. F. G. Hopkins, F.R.S., on the importance of organic chemistry in relation to physiology, four lectures, on Thursdays, at 4 p.m., in June, 1911.
14. Mr. E. L. Kennaway on autolysis in metabolism, four lectures, on Thursdays, at 4 p.m., in July, 1911.

V. *At St Thomas's Hospital.*

15. Dr. John Mellanby on coagulation of the blood, muscle, and milk, eight lectures, on Wednesdays, at 4.30 p.m., January to March, 1911.

Courses numbered 1, 2, 3, 4, 5, 6, 9, 10, 11, and 15 of the scheme have been recognized as advanced lectures which a candidate at the B.Sc. (Honours) Examination in Physiology may name for part of his examination (Red Book, September, 1909, p. 215). (See also Blue Book, September, 1909, p. 289.)

ORDINARY MEETING OF THE SENATE.

A meeting of the Senate was held on July 13th.

Recognition of Teachers.

The following teachers were recognized teachers of the University in the subjects at the institutions indicated:

St. Bartholomew's Hospital.—Mr. Charles Gordon Watson (Clinical Surgery).

Middlesex Hospital.—Mr. Somerville Hastings (Clinical Surgery).

Royal London Ophthalmic Hospital.—Mr. George Coats and Mr. Malcolm L. Hepburn (Ophthalmology).

D.Sc. Degree (Internal).

The degree of D.Sc. in Zoology was conferred on Miss Annie Porter, who had presented a thesis entitled Studies of Parasitic Protozoa, together with further papers contributed to the advancement of science.

B.Sc. Honours in Human Anatomy and Morphology.

It was resolved that the regulations for B.Sc. honours in Human Anatomy and Morphology (Blue Book, September, 1909, p. 287) be amended to stand as follows:

A.—Candidates who not less than one year previously have passed the Second Examination for Medical Degrees, Part II. Such candidates will be examined in the following:

1. Vertebrate Embryology.
2. Cytology, or Physical Anthropology with Practical Craniology.
3. Vertebrate Anatomy. The candidate must be prepared to be examined in the anatomy of not less than five vertebrate animals, of which not less than three shall be mammals, and one shall be a member of the Order of Primates. The candidate will be required to submit to the examiners the records and drawings of his dissections, signed by his teacher, if any. (The dissection of the human body, already provided for below, and of the rabbit, frog, dogfish, or other vertebrate, undertaken in the Zoology for the First Examination for Medical Degrees or the Intermediate Examination in Science, are not to be included in this list.)

B. Candidates who not less than two years previously have passed the Intermediate Examination in Science and who have taken the subjects of Botany and Zoology at that examination. Such candidates will be examined in Human Anatomy, including the dissection of the whole body, to be studied under a teacher of the university, or at one of the recognized medical institutions, and in—

Subjects 1, 2, and 3 as above.

4. Human Anatomy and Embryology.
5. Practical Human Anatomy, including the dissection of the whole body.
6. Physiology.
7. Elementary Practical Physiology.
8. Histology and Practical Histology.

The following candidates have been approved at the examinations indicated:

SECOND M.B., B.S. (*Part I*).—H. Archer, T. D. C. Barry, *G. A. Bird, Ursula P. Blackwell, W. R. Blore, J. P. Bracken, O. D. Brownfield, Isabel F. Buckle, Gwendolyn M. Burns, Marion M. B. Burt, N. St J. G. D. Buxton, F. W. Chamberlain, Ying-Jue Cieh, R. C. C. Clay, D. M. Connan, M. B. Cooper, F. H. L. Cunningham, J. H. Dancy, T. W. David, R. F. Fagan, V. Feldman, J. Fielding, F. B. Gilhespy, S. L. Green, H. L. H. Greer, D. W. Griffith, H. E. Griffiths, A. G. Holman, S. C. W. Iredale, A. M. Jones, W. A. E. Karunaratne, G. T. Loughborough, R. J. M. Love, W. F. MacAlevey, H. J. McCurrich, O. S. Martin, A. D. Morris, T. B. Paul, J. E. Pearce, I. H. Pearse, F. T. Rees, W. L. E. Reynolds, R. E. Roberts, *G. W. R. Rudkin, E. A. Scott, P. D. Scott, J. H. Sewart, W. G. Shakespeare, Edith G. Sherwood, H. Smith, H. J. D. Smythe, J. B. Thackeray, H. Q. F. Thompson, H. Vickers, *W. L. Webb, H. P. Whitworth, F. E. S. Willis, M. U. Wilson, W. P. Wippell, S. Y. Wong.

* Awarded a mark of distinction.

SECOND M.B., B.S. (*Part II*).—*†W. M. Ash, V. Atienza, Mabel K. Bishopp, R. Brewitt-Taylor, N. H. M. Burke, F. W. T. Clemens, R. Creasy, M. J. Cronin, L. G. Crossman, †F. E. Daunt, J. P. Davies, L. A. Dingley, R. J. C. Douty, V. W. Draper, B.Sc., W. H. Edmunds, *A. R. Elliott, Pattie R. Elliott, T. L. Ellis, A. S. Erulkar, H. T. Evans, A. G. C. Findlay, F. R. Fletcher, Gertrude M. Flumerfelt, Katherine M. L. Gamgee, E. A. M. J. Goldie, A. Goodwin, F. A. Grange, P. W. Green, C. J. A. Griffin, M. Gross, A. E. Hallinan, R. S. Harvey, G. M. Heiron, P. H. Henson, M. Hocken, J. M. Joly, T. P. Kilner, L. M. Ladell, T. P. Lewis, Muriel A. Lloyd, J. D. Lyle, G. R. Lynch, †Fede M. Mackenzie, †C. J. Marshall, L. A. Martin, P. M. Masina, W. Matthews, *J. N. Mehta, †H. L. Meyer, A. G. H. Moore, *D. E. Morley, E. M. Morris, Edith M. N. Moss, W. D. Owen, R. D. Passey, P. T. Patel,

G. R. Pennant, Edna M. Powell, J. B. Randall, L. N. Reece, G. H. Roberts, J. E. Robertson-Ross, J. A. Ryle, W. B. Sanders, A. R. Sharrod, W. G. Shaw, C. Sherris, A. J. E. Smith, S. Smith, W. H. D. Smith, E. N. Snowden, J. L. Stewart, Agnes P. Taylor, ‡J. R. K. Thomson, C. E. Thornton, J. A. Tsoi-A-Sue, T. B. Vaile, J. R. M. Whigham, A. H. White, C. L. Williams, ‡A. Wilson, A. Wei-tak Woo, W. A. Young.

* Distinguished in Anatomy.
† Distinguished in Physiology.
‡ Distinguished in Pharmacology.

VICTORIA UNIVERSITY OF MANCHESTER.

The following candidates have been approved at the examinations indicated:

First M.B., Ch B. (*Part III, Organic Chemistry and Bio-Chemistry*).—Lily Allan, W. R. Blore, J. Brooks, J. E. Brooks, B. Browning, F. Chadwick, W. Christopher, J. W. Craw, N. H. Davison, O. M. de Jong, A. T. Gibb, W. Halliwell, K. G. Haworth, J. R. Jagger, J. D. Kenyon, E. A. Linell, Clara A. Lomas, K. Maximus, A. S. Paterson, W. A. Rogerson, J. R. B. Russell, J. R. Slack, L. H. Walker, H. Wilson.

Third M.B., Ch B. (*General Pathology and Morbid Anatomy*).—C. T. G. Bird, J. Leach, T. W. Martin, H. G. Peake, W. J. A. Quine, C. M. Stallard.

Third M.B., Ch.B. (*Pharmacology and Therapeutics*).—F. S. Bedale, R. B. Berry, *A. G. Bryce, L. T. Challenor, J. Cowan, G. C. Dixon, G. Fildes, C. W. Fort, E. Grey, G. Jackson, D. S. Jones, J. Leach, J. A. Lees, A. H. Macklin, Mabel E. May, P. H. Midgley, T. H. Oliver, L. W. Sparrow, R. P. Stewart, C. F. White, A. G. Wilkinson, H. D. Willis, S. A. Winstanley, W. H. Wood, H. C. Wright.

Third M.B., Ch.B. (*Hygiene*).—F. S. Bedale, R. B. Berry, C. T. G. Bird, A. G. Bryce, L. T. Challenor, J. Cowan, G. C. Dixon, G. Fildes, C. W. Fort, E. Grey, G. Jackson, D. S. Jones, J. Leach, J. A. Lees, A. H. Macklin, Mabel E. May, P. H Midgley, T. H. Oliver, L. W. Sparrow, R. P. Stewart, C. F. White, A. G. Wilkinson, H. D. Willis, S. A. Winstanley, W. H. Wood, H. C. Wright.

* With distinction.

Final M.B., Ch.B. (*Forensic Medicine and Toxicology*).—C. E. Butterworth, K. D. Bean, A. H. Holmes, L. W. Howlett, W. H. Laslett, Jane C. Miller, M. Moritz, Lovell Moss, G. E. Sawdon, W. Stirling, J. S. B. Stopford, G. K. Thompson, W. Warburton.

Final.—A. E. Ainscow, Estelle I. E. Atkinson, ‡R. Briercliffe, G. T. Cregan, C. Davies, T. E. Dickinson, Gertrude H. Geiler, ‡‖R. C. Hutchinson, R. B. Jackson, W. H. Parkinson, *‡§W. A. Sneath, W. B. Wamsley, W. Wright.

* First-class honours. † Second-class honours.
‡ Distinction in obstetrics. § Distinction in medicine.

B.Sc. in Public Health.—A. Grant.

D.P.H.—J. D. Buchanan, T. Burrell, Mildred M. L. Cathels, S. J. Clegg, J. B. Ferguson, F. Hall, R. Holmes, A. B. McMaster, J. S. Manson, Agnes H. Nicoll, A. H. Norris, F. Webb, Winifred F. Wigglesworth, F. E. Wynne.

The University Prize in Medicine has been awarded to A. G. Bryce.

UNIVERSITY OF DURHAM.

At a Convocation on Saturday, July 23rd, the following degrees were conferred:

M.D.—N. A. Eddleston, H. M. Levinson, R. O. Mather, H. R. McAleenan, R. R. Pirri, S. Robson, A. Smith, J. W. Smith.

M.D. (for Practitioners of Fifteen Years' Standing).—W. W. Bell, H. Collier, H. H. P. Cotton, W. B. Darroll, W. H. Hargreaves.

M.S.—H. M. Levinson, S. Robson.

M.B.—I. Bainbridge, J. A. Caulcrick, Helen G. Clark, R. V. Clayton, S. F. St.D. Green, J. Hare, S. Littlewood, Eva Lumb, G. C. M. McGonigle, C. E. Reindorf, E. H. Shaw, S. Worthington, J. C. Young.

B.S.—I. Bainbridge, Helen G. Clark, R. V. Clayton, J. Hare, S. Littlewood, Eva Lumb, G. C. M. M'Gonigle, C. E. Reindorf, E. H. Shaw, S. Worthington, J. C. Young.

B.Hy.—W. G. T. Hepplewhite, F. Rathkens.

On the same occasion Diplomas in Public Health were handed to the following: W. G. T. Hepplewhite, Sophia B. Jackson, K. Jamset, J. A. Neilan, F. Rahtkens, H. M. Stumbles.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

An ordinary quarterly Comitia was held at the College on Thursday, July 28th, the President, Sir Thomas Barlow, in the chair.

His Majesty's Reply to Address from the College.

The President reported that His Majesty the King had graciously received a deputation to present the address from the college, and called upon the Registrar to read the following reply, the Fellows all standing:

> I thank you on behalf of the Queen and myself for the loyal and dutiful address which you have laid before me to-day.
>
> It is a consolation to me in this time of sorrow to feel that my grief is shared by my subjects in all parts of the great Empire over which I have been called to reign, and to know that the character and aims of my beloved father were appreciated by those whose prosperity and welfare were ever in his thoughts.
>
> You may be assured that it will be my constant endeavour to justify the confidence which you repose in me; to follow, with the help of Almighty God, in my father's footsteps; to uphold the honour of our country; and to labour, so far as in me lies, for the prosperity and progress of my people.

Reply of Queen Alexandra to Address of Condolence from the College.

The following letter from Sir Edward Troup was read:

I am directed by the Secretary of State to inform you that the address of condolence of the President and Fellows of the Royal College of Physicians of London, on the death of His late Majesty King Edward the Seventh, has been laid before Queen Alexandra, whose thanks I am to convey to you.

Membership.

The following gentlemen were admitted Members of the College:

John George Adami, M.D.Camb., Benjamin Hobbs Deare, L.R.C.P., Major I.M.S., Gilbert Henry Dive, L.R.C.P., R.A.M.C., Septimus Montague Hebblethwaite, M.D.Lond., Sorabji Manekji Kaka, L.R.C.P., Peter N. Lakshmanan, M.B.Madras, L.R.C.P.

Licences.

The Licence of the College was granted to eighty-eight candidates.

Murchison Scholarship.

The report of the Examiners for the Murchison Scholarship was received, and the certificate was presented to the successful candidate, Mr. W. W. C. Topley, L.R.C.P., of St. Thomas's Hospital.

College Officials.

On the nomination of the President, the Council, and the Library Committee, the following were elected Censors, other College Officers, and Examiners:

Censors: Frederick Taylor, M.D.; Francis de Havilland Hall, M.D.; Seymour John Sharkey, M.D.; David Bridge Lees, M.D. *Treasurer:* Sir Dyce Duckworth, Bart., M.D. *Emeritus Registrar:* Edward Liveing, M.D. *Registrar:* Joseph Arderne Ormerod, M.D. *Emeritus Harveian Librarian:* Joseph Frank Payne, M.D. *Harveian Librarian:* Norman Moore, M.D. *Elected Members of the Library Committee:* Humphry Davy Rolleston, M.D.; Arthur Francis Voelcker, M.D.: Raymond H. P. Crawfurd, M.D.; Charles Arthur Mercier, M.D. *Curators of the Museum:* Sir William Henry Allchin, M.D.; Frederick William Andrewes, M.D.; Seymour John Sharkey, M.D.; William Hunter, M.D. *Finance Committee:* Howard Henry Tooth, C.M.G., M.D.; George Newton Pitt, M.D.; Herbert Pennell Hawkins, M.D. *Examiners.—Chemistry:* Wm. Holdsworth Hurtley, D.Sc.; Hugh C. H. Candy, B.Sc. *Physics:* Dawson F. D. Turner, M.D.; Alfred Henry Fison, D.Sc. *Practical Pharmacy:* Arthur Philip Beddard, M.D.; Edmund Ivens Spriggs, M.D.; William James Fenton, M.D.; Alfred Ernest Russell, M.D.; Arthur Robertson Cushny, M.D. *Physiology:* Nathaniel Henry Alcock, M.D.; Marcus Seymour Pembrey, M.D. *Anatomy:* Christopher Addison, M.D. *Medical Anatomy and Principles and Practice of Medicine:* Wilmot Parker Herringham, M.D.; Richard Grainger Hebb, M.D.; Sidney Harris Cox Martin, M.D.; Herbert Pennell Hawkins, M.D.; Sir Edwin Cooper Perry, M.D.; Sir Hugh Reeve Beevor, Bart., M.D.; James Galloway, M.D.; Arthur Francis Voelcker, M.D.; Wilfred James Hadley, M.D.; Wilfred John Harris, M.D. *Midwifery and Diseases peculiar to Women:* Arthur Hamilton Nicholson Lewers, M.D.; George H. Drummond Robinson, M.D.; Arthur Francis Stabb, M.B.; George H. A. Comyns Berkeley, M.D.; John Shields Fairbairn, M.B. *Public Health:* Part I, Henry Richard Kenwood, M.B.; Part II, Louis C. Parkes, M.D.

Fellowship.

The Registrar moved for the second time the following temporary by-law:

"That Robert Dawson Rudolph, M.D.Edin., elected to the Fellowship on April 28th, 1910, being resident in Canada, be admitted in absentia; any by-law to the contrary notwithstanding."

Communications.

The following communications were received:

1. From the Clerk of the Privy Council, *re* the Petition of the College against the proposed Charter of the British Medical Association.

2. From Dr. J. F. Payne, thanking the College for conferring upon him the title of Emeritus Librarian.

3. From Sir James R. Andrew Clark, asking leave to have a copy made of the portrait of the late Sir Andrew Clark, in possession of the College.

Leave was granted.

4. From the Committee of Management of the Chelsea Physic Garden, thanking the College for their donation.

5. From the Registrar of the General Medical Council concerning—

(*a*) The Assistant Surgeon Branch of the Indian Subordinate Medical Department.

(*b*) The subjects of the Final Examination, and whether candidates should be allowed to enter for them separately.

6 From the Secretary of the Royal College of Surgeons, reporting proceedings of the Council of that College on June 9th.

7. From the Clerk to the Corporation of the City of Glasgow, concerning Congresses on Public Health.

8. From the Secretary to the Imperial Merchant Service Guild, concerning a Committee upon sight-testing which has been appointed by the Board of Trade.

Reports.

The following reports were received:

1. From Dr. H. Lewis Jones, on the Third International Congress of Physio-Therapy held in Paris, March 29th to April 3rd, 1910.

2. From the representative of the College on the General Medical Council.

3. From the Committee of Management, dated June 7th, recommending:

(*a*) That the following universities be placed on the list of universities whose examinations are recognized as exempting candidates from the first and second examinations of the Board under the conditions of Paragraph III, Section III, of the Regulations—namely, the National University of Ireland, and Queen's University, Belfast.

(*b*) That the George Washington University, Washington, U.S.A., be added to the list of foreign universities whose graduates are exempted from the first and second examinations of the Board under the conditions of Paragraph IV, Section III, of the Regulations.

(*c*) That the following hospitals be added to the list of fever hospitals recognized by the Board for instruction in infectious diseases: The Kendray Hospital for Infectious Diseases, Barnsley; and the Great Yarmouth Fever Hospitals.

4. From the same, dated July 12th, recommending:

(*a*) That the Grammar School, Wolverhampton, be added to the list of institutions recognized by the Examining Board in England for instruction in Chemistry and Physics.

(*b*) That Dr. Frederick Taylor be appointed the visitor to the examinations of the Egyptian Medical School for the examinations to be held in December next.

(*c*) That the fee for each part of the examinations for the diploma in Public Health be raised from six to ten guineas for those candidates who do not possess the diplomas of the Royal Colleges, and that such alteration do apply to all such candidates who enter for the first time on or after July 1st, 1911.

All these recommendations were adopted.

The Annual Report of the Imperial Cancer Research Fund, the Quarterly Report of the College Finance Committee, the Annual Report of the Library Committee, the Annual Report of the Curators of the Museum, and the Quarterly Report of the Examiners for the Licence on the results of the examinations in April last were received.

Library.

Books and other publications presented to the Library during the past quarter were received, and thanks returned to the donors.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

ORDINARY Council, July 25th, Mr. H. T. Butlin, President, in the chair.

Diplomas.

Diplomas of Membership were granted to eighty-three candidates found qualified at the recent examination, and diplomas in Public Health were granted to twenty-four candidates found qualified.

Imperial Cancer Research Fund.

Mr. Clement Lucas was elected a member of the Executive Committee of the above, in place of Sir Henry Morris, Bart., treasurer of the fund, who becomes a member *ex officio*.

Museum.

Mr. Stephen Mayou will undertake the revision of the ophthalmological collection of the college.

Mr. A. H. Cheatle is about to undertake the revision of the otological collection.

Examinership in Dental Surgery.

The term of office of Mr. A. S. Underwood will expire on October 12th next. The vacancy thus occasioned will be filled up at the quarterly meeting of the Council in that month.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

THE following candidates were admitted to the Fellowship at a meeting on July 29th:

G. W. Badgerow, D. D. Baria, R. D. Brummitt, A. Dangerfield, C. A. A. Dighton, J. Fraser, D. J. M. Legge, G. M. B. Liddle, J. L. Lohse, G. J. Luyt, A. H. M. Maxwell, J. G. P. Murray (Major I.M.S.), R. S. Taylor, W. Thomson, M. H. Thornely (Captain I.M.S.), and A. Toulmin.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE following awards have been made in connexion with the examinations at the end of the now concluded summer session:

The *Barker Anatomical Prize*, Mr. T. Mather Thomson; the *Carmichael Scholarship*, Mr. M. J. Hillery; *Mayne Scholarship*, Mr. J. S. Pegum; *Gold Medals in Operative Surgery*, Mr. J. S. Pegum and Mr. F. W. Warren; *Stoney Memorial Gold Medal in Anatomy*, Mr. M. J. Hillery. The Barker Anatomical Prize is of the value of £26 5s., and the Carmichael Scholarship £15. Awards of money prizes, medals, and certificates were also made in connexion with practical histology, practical chemistry, public health and forensic medicine, materia medica, and biology. Lectures and practical courses recommence on October 15th.

CONJOINT BOARD IN ENGLAND.

AT a meeting of the Council of the Royal College of Surgeons of England on July 25th, and of the Comitia of the Royal College of Physicians of London on July 28th, diplomas of Member and Licences to practise were respectively conferred upon the following candidates:

E. A. Attenborough, G. W. Beresford, C. A. Birts, J. G. Blechschmidt, W. S. Boothman, R. F. B. Bowes, S. E. V. Brown, J. Capell, R. C. Clarke, *R. E. Collins, E. G. H. Cowen, F. E. Cox, T. R. Davey, F. A. Dick, H. W. Doll, R. Drummond, E. C. East, J. A. Edmond, F. C. Endean, B. C. Eskell, W. A. Fernando, C. J. Fox, A. L. George, E. P. Ghadiali, C. Gibson, A. J. Gilchrist, B. Goldsmith, A. H. Gosse, C. D'O. Grange, H. E. Griffiths, B. Herald, S. J. Higgins, R. M. Hiley, J. B. H. Holroyd, W. H. Hooton, A. N. Houghton, *C. A. Joll, *A. R. Jones, M. M. Khan, W. S. Kidd, C. H. Knowles, W. Krupp, A. B. Lindsay, J. P. Lupton, †W. Macewen, C. McIver, P. A. Mackay, J. C. Mackwood, J. R. McRae, H. L. Mann, H. L. Martyn, G. Matthews, T. C. Maxwell, A. O. Mitchell, C. G. H. Moore, A. L. Moreton, A. Morgan, *D. N. Mudliar, H. Neame, H. L. C. Noel, R. S. Overton, A. C. Paterson, E. A. Penny, J. F. Penson, A. S. Pern, E. P. Poulton, L. Powell, E. A. Ramsden, S. S. Rao, A. H. Richardson, C. G. Richardson, A. S. Roe, A. L. Saul, C. F. Schuler, S. H. Smith, R. M. Soames, W. B. Stones, R. Stout, F. K. te Water, H. W. Tilling, R. H. Vercoe, H. H. V. Welch, A. J. O. Wigmore, W. S. Wildman, F. J. Willans, A. D. J. B. Williams, W. F. Wise, C. Woollard.

* M.R.C.S. Diploma previously granted.
† M.R.C.S. Diploma not yet granted.

THE following candidates have been approved at the examinations indicated:

FIRST COLLEGE (*Part I, Chemistry; and Part II, Physics*).—*W. G. E. Allen, †P. W. L. Andrew, P. W. Barnden, N. Briggs, †E. V. Briscoe, E. Catford, J. Crétin, D. R. Curnock, L. S. Debenham, *R. E. B. Denny, J. D. Dimock, *H. G. Dresing, J. A. Durante, S. E. Y. Elliott, †D. T. Evans, *J. E. Evans, †C. J. G. Exley, †M. Fahmy, †F. E. Fielden, S. W. Fisk, G. D. Gripper, †D. V. Halstead, E. A. Hardy, *W. H. Harris, F. C. Harrison, I. S. James, G. P. Kidd, *K. E. King, †A. G. Lennon-Brown, †J. S. Leslie, J. A. Liley, N. H. Linzee, †A. T. Madin, †N. H. S. Maelzar, S. Mallinick, H. W. Maltby, *H. Millett, D. S. E. Milligan, †G. S. Mitchell, H. G. Moser, *H. F. Mullan, *K. M. Nelson, C. F. Newman, M. Pearson, E. N. Perham, J. Precopoulos, H. P. Price, C. R. Reckitt, C. Y. Roberts, L. C. S. Roche, †E. S. Rowbotham, G. F. Rowcroft, †N. H. W. Saw, P. de S. Smith, C. S. Staddon, †A. D. Stammers, W. F. Stiell, †W. H. A. D. Sutton, H. B. Taylor, †J. A. Tippet, †W. A. Turner, †W. E. Wade, A. H. Warde, G. L. Wilkinson.

* Passed in Part I only. † Passed in Part II only.

FIRST COLLEGE (*Part III, Elementary Biology*).—P. W. Barnden, J. H. Bayley, M. Bayumi, A. A. Brown, A. C. O. Brown, E. I. Davies, L. S. Debenham, J. D. Dimock, H. G. Dresing, F. E. Fielden, J. Fox-Russell, G. C. Gell, K. J. M. Graham, J. A. Gregory, J. V. Griffith, G. D. Gripper, W. H. Harris, F. C. Harrison, J. A. Hart, J. R. John, K. E. King, A. J. V. McDonnell, J. McDonnell, W. D. McRae, F. J. Messer, W. H. Milligan, C. F. Newman, T. M. Payne, M. Pearson, H. D. Pickles, J. Precopoulos, E. S. Rowbotham, J. Rumjahn, A. R. Sami, H. L. Smith, W. F. Stiell, H. B. Taylor, G. S. Terry, W. E. Wade, G. L. Wilkinson.

SOCIETY OF APOTHECARIES OF LONDON.

THE following candidates have been approved in the subjects indicated:

SURGERY.—*F. H. W. Brewer, *†J. M. Burke, *†C. S. Foster, *W. J. G. Gayton, *M. S. Jevons, *J. K. Nariman, *†A. H. Rich, *†F. C. V. Thompson.

MEDICINE.—*A. Cordon, †M. S. Jevons, †H. M. Jones, †J. K. Nariman, †C. Pyper, *†R. Rowlands.

FORENSIC MEDICINE.—G. J. F. Elphick, C. W. Hayward, M. S. Jevons, F. G. Norbury, A. McL. Pickup.

MIDWIFERY.—J. Ellison, C. B. Hawthorne, R. G. Maglione, F. G. Norbury, W. E. North-Smith, C. B. Welsby.

* Section I. † Section II.

The diploma of the society has been granted to Messrs. J. M. Burke, C. S. Foster, H. M. Jones, W. E. North-Smith, C. Pyper A. H. Rich, R. Rowlands, and F. C. V. Thompson.

LONDON SCHOOL OF TROPICAL MEDICINE.

THE following candidates were approved at the examination held at the end of the Thirty-third Session:

*†A. Connal, *† R. Seheult, *†H. L. Duke, *†W. V. M. Koch, *H. Falk (Captain, I.M.S.), †C. L. Eyles †F. L. Boag, M. Y. Young, J. F. Leys (U.S. Navy), R. H. S. Marshall, †G. C. M. Davies, José F. de Pazos, G. Hoyos Robledo.

* Passed with distinction.
† H.M. Colonial Medical Service.

ON July 20th a presentation was made to Dr. A. G. Lawrence, of Chepstow, on his retirement after fifty years of practice. The gift to Dr. Lawrence was a massive silver tray, with high filigree edge, bearing on the centre the inscription: "Presented to Arthur Garnons Lawrence, M.D., by many friends in token of the esteem and regard in which he has been held during the fifty years of medical service to sick and poor in and around Chepstow." A presentation to Mrs. Lawrence took the form of a heavily moulded silver kettle and stand, inscribed: "Presented to Mrs. Arthur Garnons Lawrence in token of the regard and affection of her many friends, and in grateful recognition of long and loving service to sick and afflicted neighbours." In addition to these presents was a large album, neatly bound in leather, containing the names of the subscribers, and which practically contained the names of every one in the town and district.

Medico-Legal.

CORONER'S UNAUTHORIZED AUTOPSIES.

At an inquest held at Porth on July 10th, Mr. Rees, the coroner, intimated his intention of communicating with the Home Office, because an autopsy had been made without his authority.

It appears that David B. Jones, colliery labourer, who had sustained an accident some years before, had been attended by Dr. Cochrane, and his dispenser suggested to the widow that a *post-mortem* examination should be made. The suggestion was communicated to Mr. D. Watts Morgan, miners' agent, who, it was alleged, instructed Dr. Mitchell Stevens, Cardiff, with the result that a *post-mortem* examination was carried out on Friday by Dr. Stevens, Dr. Cochrane being present.

Dr. Cochrane gave evidence that death was due to cardiac disease. He was quite satisfied, and would have given a death certificate and not ordered a *post-mortem* examination. The Miners' Federation, he said, was responsible for the instructions, and his dispenser had no right to make any suggestion. Dr. Stevens had acted on the instructions of Mr. D. Watts Morgan.

Lewis Jones, brother of the deceased, stated that Mr. Edwards, the dispenser, told him that he was of opinion that the death of his brother was due to the effects of the accident.

In summing up, the coroner said this was the second time an unauthorized *post-mortem* examination had been conducted at Porth. It was not fair to the colliery company that a *post-mortem* examination should be held in this way. He felt sure that neither Dr. Mitchell Stevens nor Dr. Cochrane would have been concerned in the *post-mortem* examination had they known, without first of all communicating with him in the matter. He would ask the Home Office to inquire into the matter. If the relatives of the deceased could not rely upon their own doctor, he (Mr. Rees) did not know what people were coming to.

The jury returned a verdict, in accordance with the evidence of Dr. Cochrane, that death was due to heart failure.

SOME AMERICAN MEDICAL CASES.

Actions for negligence against members of the medical profession are so rare in this country that the "Digests" may be searched for many years past without revealing a single case where any new principle is enunciated. Such cases, however, sometimes occur in America. In that country there are many courts, interpreting the laws of many States. So numerous are the decisions that the mere "Digest" each year fills two volumes, each as big as Webster's Dictionary! In the volume which contains the cases reported during the latter half of 1909 there are several decisions of interest to the medical profession. In one of these (*Brown* v. *Bennett*, 122 N.W. 305), in an action against two physicians for malpractice, it was held that there was no joint undertaking by them, and that the want of care by one in leaving a surgical sponge in a wound was not imputable to the other.

Although the law as applied in America is founded on the principles of English jurisprudence, it has in some instances developed out of all recognition. In our courts it is often necessary to explain a scientific case to the judge and jury by means of models and diagrams. For instance, in an action against a surgeon for negligence in amputating a limb, it might be necessary to produce diagrams or skiagraphs. But what English lawyer would have thought it necessary to call for the production of the limb itself? In another American case (*Farrell* v. *Haze*, 122 N.W. 197) a charge of malpractice was based on the improper treatment of a Potts fracture, necessitating amputation of a leg. The evidence showed that portions of the bones were removed before amputation, and that the condition of the bones before and at amputation indicated a continuing disintegration from some cause long active after the defendant ceased to treat the injury. In these circumstances it was solemnly held that the bones of the amputated limb could not be received as an exhibit.

The following is a summary of another peculiar case: "In an action against a physician for malpractice, the plaintiff is not entitled to recover smart money." The facts of the case were that the physician had used an unsterilized instrument, whereby the plaintiff had contracted a private disease. It was decided that the plaintiff was not required to prove her case beyond a reasonable doubt. She need not give direct and positive evidence.

The question, who is liable for payment of fees, also arises in the States. In one case (*Hall* v. *Allen*, 104, p. 489) a man, 25 years old, without means and away from his people, was injured, and a physician began to treat him. His sister subsequently wrote to the physician requesting information as to his condition, and stating that the expenses would be paid. It was held that the sister directly employed the physician at her own expense, and that he might recover from her his fees for services rendered after the receipt of the letter.

MIDWIFERY ENGAGEMENTS.

Incog.—A midwifery engagement is binding in law, and the fee can be recovered, even should the lady call in some one else to attend her. Her only course is to ask Dr. B. to release her, but Dr. C. should rather discourage than abet her in what seems to be a capricious change of mind.

THE ASSUMPTION OF MEDICAL TITLES.

Inquirer.—The Medical Act (1858), clause XL, penalizes the assumption of certain medical titles, but the decisions of magistrates have been conflicting, and it is impossible to say whether a prosecution of the quack who calls himself a "herbal physician" would be successful.

Medico-Ethical.

The advice given in this column for the assistance of members is based on medico-ethical principles generally recognized by the profession, but must not be taken as representing direct findings of the Central Ethical Committee, except when so stated.

PATIENTS AND PRACTITIONERS.

H. V. writes that A. had been in attendance on a case for three days when a friend called to enquire and sent his own medical adviser, C., to visit the case, which C. did, giving A. only three hours' notice. Our correspondent does not state whether A. was able to be present, but asks us to say whether C.'s proceeding was usual?

*** If C. asked A.'s permission to visit the case with him and A. assented and the joint visit took place there was nothing unusual or improper in the proceeding. The length of notice is not material, as A. could have demurred and asked for a more convenient time. A. could have refused to meet C. if he thought fit to do so, although this is, as a general rule, unwise, and C. could not without a breach of etiquette have visited the patient by himself.

A "SEAWEED TONIC."

A correspondent sends us a cutting from the *Tredegar, Bargoed, and Caerphilly Journal* containing a picturesque paragraph relating to Veno's Seaweed Tonic, informing the public that a nurse is in daily attendance to administer doses of this concoction to credulous vendors, and advice to sufferers from all sorts of diseases. He wishes to know whether this can be stopped.

*** It is to be feared there are many advertisements of this nature issued in the press all over the country. It is very doubtful whether they are illegal under the present law, and it would probably be a waste of time and money to bring such cases before the courts.

FEES.

"Foozler" asks the following questions: (1) In private practice is it usual to charge the same for an abortion, or miscarriage, as for a confinement? (2) When a wound or ulcer is dressed in the course of a professional visit should a higher fee be charged than for an ordinary visit? (3) For setting a fracture, or reducing a dislocation ought a higher fee to be charged than for an ordinary visit?

*** (1) This would depend on the attendance required. The charge might be more, or less, than an ordinary confinement fee. (2) Under these circumstances, more time might be required of the practitioner, and the fee charged would be higher than for an ordinary professional visit. (3) It is usual to charge a special fee inclusive of, or in addition to, the ordinary visit for the treatment of such cases.

Obituary.

We regret to have to announce the death, on July 27th, of Dr. Wm. Spence of Dollar, while on a visit to his brother-in-law, Mr. Hugh Laird, at Aberfeldy. He had an attack of appendicitis, and on the evening of the 24th an operation was necessary, from the effects of which he never rallied. Dr. Spence had not been in robust health for about a year past. He spent the winter and spring at Davos, and had just returned greatly improved. Born at Letham, Fifeshire, fifty years ago, Dr. Spence studied medicine at Edinburgh University, taking his M.B. C.M. degrees in 1882 and his D.P.H. at Glasgow some years later. He had been in Dollar for twenty-three years, where he carried on a large practice. He was parochial medical officer for Dollar. He was a keen sportsman, and specially excelled as a curler. Dr. Spence is survived by a wife, three daughters, and a son, to whom, at this time, much sympathy will be extended from Dr. Spence's many friends.

We regret to announce the death of Dr. G. B. Halford, late Professor of Physiology in the Melbourne University, at the age of 86. In 1862 Dr. Halford was appointed to the charge of the medical school in Melbourne. He resigned his professorship fourteen years ago.

Letters, Notes, and Answers.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, London, W.C.; those concerning business matters, advertisements, non-delivery of the JOURNAL, etc., should be addressed to the Office, 429, Strand, London, W.C.

TELEGRAPHIC ADDRESS.—The telegraphic address of the EDITOR of the BRITISH MEDICAL JOURNAL is *Aitiology, London.* The telegraphic address of the BRITISH MEDICAL JOURNAL is *Articulate, London.*

TELEPHONE (National):—
2631, Gerrard, EDITOR, BRITISH MEDICAL JOURNAL.
2630, Gerrard, BRITISH MEDICAL ASSOCIATION.
2634, Gerrard, MEDICAL SECRETARY.

ORIGINAL ARTICLES and LETTERS *forwarded for publication are understood to be offered to the* BRITISH MEDICAL JOURNAL *alone unless the contrary be stated.*

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

M. would be much obliged for advice as to treatment of "tumultuous" fetal movements, a condition not described in midwifery books consulted. Movements generally come on when mother goes to bed, excite "jumping" of one or both legs, the origin of which is referred to the insertion of psoas and iliacus muscles, and prevent sleep. Six months pregnancy. Similar condition with previous quite healthy child. Mother healthy, not neurotic. Bromides, chloral, trional in fair doses (gr. xx) apparently have no effect.

PAKEHA writes: Can any reader suggest a remedy for persistent pain in the following case: Widow, aged 65, hotel keeper. Had protracted illnesses in 1906 and 1909. Gouty diathesis, large flabby heart, enlarged liver, occasional trace of albumen, with also occasional shortage of urine; abdominal ascites, which varies in amount; frequent flatulence, occasional attacks of eczema. She has a rooted dislike to patiently trying any mixture which is not most palatable, and a firm belief that hot gin is her most useful remedy. During her illness last year she had agonizing pain below the left scapula; this has now moved inwards until it is almost central but at the same level. The left radial pulse is distinctly weaker than the right, but she has no tracheal tugging, nor cough. She would be fairly happy if her pain could be relieved, and "Pakeha" will be grateful for suggestions.

ANSWERS.

"EQUITY," "G. P.," "Justice," and "M. A." have omitted to enclose their cards.

LETTERS, NOTES, ETC.

AN APPEAL.

DR. J. B. RICHARDSON (retired) of South Brent writes that Dr. Style, of that village, met with a very serious accident some weeks ago, fracturing the pelvis, and causing serious injury to the bladder and intestines. His motor is damaged beyond repair, and at a representative meeting here, at which Dr. Richardson was in the chair, the following motion was carried: "Following the strong feeling expressed throughout the district that some practical and tangible mark of the respect and esteem felt for Dr. Style should be shown him at this particular period, a public meeting was held in the council schools on Tuesday, July 12th, when it was unanimously resolved to invite subscriptions towards a testimonial, the character of which is to be decided at a later date." The pay of a country doctor is small, the work hard, and bad debts not unknown, and I think there must be many members of the profession who would be glad to help in a case such as this. I shall be happy to receive and acknowledge any subscriptions to this laudable object.

OPTIC NEURITIS IN CHLOROSIS.

THE writer of the note on optic neuritis, which appeared in the JOURNAL of July 16th, writes: In answer to Dr. Hawthorne's letter, published in the JOURNAL of July 23rd, I would point out that the annotation to which he refers is practically an abstract of the paper quoted taken from the *Archives of Ophthalmology.* It is unfortunately impossible to verify every reference when abstracting a series of papers. "Adducens paralysis" is a misprint for "abducens paralysis." The first object of the note was to draw the attention of medical men to the fact that optic neuritis is occasionally found in chlorosis, and to give the reference to an excellent case published in an American journal. I regret that either through my mistake or that of the eminent American author, Dr. Hawthorne's name was incorrectly spelt.

MEDICAMENTS APPLIED TO UTERUS TASTED IMMEDIATELY.

DR. R. H. KENNAN (Freetown, Sierra Leone) writes: I have just received the copy of the JOURNAL for July 2nd, in which I see a letter from Dr. Alexander Duke referring to patients recognizing by taste in the mouth what drug had been applied to the cervical canal by him. I well remember the late Sir Arthur Macan telling me in Dublin that many patients told him they "tasted kippered herrings" immediately after he had applied pyroligneous acid to the cervical canal. It seems to me that the smell of carbolic acid and iodine (so well known to the public) might suggest their "tastes" to the patients, but such would be less likely in the case of pyroligneous acid suggesting "kippered herrings."

VICARIOUS EPISTAXIS IN THE MENOPAUSE.

DR. SHELTON DALY (Manchester) writes: Having read the short notice in the EPITOME of the JOURNAL for July 30th, Par. No. 65, upon vicarious epistaxis in menopause, by Macht, I thought the following note of a case of mine might be interesting to some readers: Mrs. L., aged 31, having had two children and one miscarriage, has suffered for the last two years from copious bleeding from the gums (which are not spongy), lasting two days, and filling three handkerchiefs. This is accompanied by headache and face-flushing; in two weeks afterwards, or at the time for her ordinary period, she has a very scanty discharge from the uterus, lasting three days. Her general health is good.

ACADEMIC COSTUMES.

SCARLET LIGHTNING writes: In your description of the different gowns and hoods of the British Universities you are not quite correct with regard to the M.B. of Bristol. The gown is stuff *or silk.* The hood is black foundation; "Bristol red" (a distinct and characteristic colour) lining; salmon colour edging.

X. P. writes: You are probably not aware that the Royal College of Surgeons in Ireland grants an academic costume to its Fellows and Licentiates, thus:

Fellows.—Black stuff Master of Arts gown, faced with St. Patrick's blue Irish poplin border, 5 in. in width, narrowing round the collar behind, and extending to each end of the gown in front. Inside of the blue poplin there shall be a crimson Irish poplin lining 5 in. in width and of similar extent as the blue. Cap: Black velvet college cap, with St. Patrick's blue and crimson tassel.

Licentiates.—Black stuff Master of Arts gown, faced with St. Patrick's blue Irish poplin border, 2½ in. in width, *not* extending behind collar, but continuous to each end of the gown in front. Inside the blue poplin there shall be a crimson Irish poplin lining, 2 in. wide, and of similar extent as the blue. Cap: A black cloth college cap, with black tassel.

Will Messrs. Eve kindly take note, as there are many Fellows and Licentiates in London and elsewhere who are proud of the old college in Stephen's Green?

The Edinburgh Royal College of Physicians has also an academic costume, but I do not know particulars enough to describe it.

CLIMATE FOR LATENT PHTHISIS.

DR. JOHN P. ATKINSON, JUN., B.A., M.R.C.S., L.R.C.P. (Saffron Walden) writes: At page 239 in the BRITISH MEDICAL JOURNAL of July 23rd, I notice under the heading "Climate for Latent Phthisis," "M.D." writes, "the patient should avoid (2) a place where drinking water is drawn from the chalk." I presume this has reference more to the constipation than the latent phthisis, for from the rarity of phthisis in this chalky part of Essex, and the fact that cases imported here do well, I have been led to speculate as to whether a chalky water has not a beneficial effect on phthisis, and should be interested to obtain further information on the subject. The contrast in the number of cases and their favourable course when occurring is very marked compared with a previous experience in Devonshire, where the water was soft, peaty, and moorland.

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